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24 July 2001

Mr. Michael Farley, Esq. Jervis B. Webb Company 34375 West Twelve Mile Road Farmington Hills, Michigan 48331

Subject:

Quarterly Progress Report for April through June 2001 For the Jervis B. Webb Company of California Property,

5030 Firestone Boulevard, South Gate, California (RWQCB SLIC File No. 744; EKI 991103.01)

Dear Mr. Farley:

Erler & Kalinowski, Inc. is pleased to present the enclosed *Quarterly Progress Report for April through June 2001*, dated 24 July 2001. This report describes the activities completed during the period from April through June 2001 at the Jervis B. Webb Company of California property located at 5030 Firestone Boulevard in South Gate, California.

Please contact us if you have any comments or questions.

Very truly yours,

ERLER & KALINOWSKI, INC.

Steven R. Chambers, Ph.D.

Project Manager

Steven G. Miller, P.E. Supervising Engineer

cc:

Mr. Michael Feeley

Quarterly Progress Report April through June 2001

Jervis B. Webb Company of California 5030 Firestone Boulevard South Gate, California

24 July 2001

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Quarterly Progress Report: April through June 2001 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

<u>1.</u>	INTR	ODUCTION	1
<u>2.</u>	<u>QUA</u>	RTERLY GROUNDWATER MONITORING	2
	<u>2.1.</u> <u>M</u>	easurements of Groundwater Elevation	2
	2.2. <u>G</u> 1	roundwater Sampling	2
	<u>2.2.1.</u>	Groundwater Sampling Procedures	2
	<u>2.2.2.</u>	Analytical Results for Groundwater Samples	3
	<u>2.2.3.</u>	Quality Assurance/Quality Control	3
<u>3.</u>	SOIL	REMEDIATION	5
	3.1. <u>De</u>	escription of the Soil Vapor Extraction System	5
	3.1.1.	Soil Vapor Wells	5
	<u>3.1.2.</u>	Soil Vapor Extraction and Treatment System	6
	3.2. O	peration and Monitoring of the SVE System	6
	3.2.1.	System Operation	6
	<u>3.2.2.</u>	System Monitoring	6
	3.3. <u>So</u>	il Vapor Sampling	7
	<u>3.3.1.</u>	Vapor Well and System Influent Sampling	7
	<u>3.3.2.</u>	Estimated VOC Removal Rates	9
	<u>3.3.3.</u>	Soil Vapor Field Monitoring	9
	<u>3.3.4.</u>	SCAQMD Compliance Monitoring	10
	3.4. <u>Sta</u>	atic Vapor Sampling	10
	3.5. <u>Re</u>	equest for Closure of Soil Remediation Activities at the Site	12
<u>4.</u>	SUM	<u>MARY</u>	14
5.	REFE	RENCES AND PREVIOUS REPORTS	16

Quarterly Progress Report: April through June 2001 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

LIST OF TABLES

6

1	Groundwater Elevations in Monitoring Wells
2	Results of VOCs Detected in Groundwater Samples
3	Additional Analytical Results for Groundwater Samples
4a	Soil Vapor Extraction Data: Blower Influent
4b	Soil Vapor Extraction Data: SVE-1
4c	Soil Vapor Extraction Data: SVE-2
4d	Soil Vapor Extraction Data: SVE-3
4e	Soil Vapor Extraction Data: SVE-D1
4f	Soil Vapor Extraction Data: VMP-D1
4g	Soil Vapor Extraction Data: VMP-D2
4h	Soil Vapor Extraction Data: VMP-1
5	Field Data for Soil Vapor Monitoring Probes

Soil Vapor Laboratory Analytical Data

Quarterly Progress Report: April through June 2001 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

LIST OF FIGURES

1 Site Location Map 2 Groundwater Monitoring Well Locations 3 Elevation of the Groundwater Table on 24 April 2001 4 Elevation of the Groundwater Table on 5 June 2001 5 Concentrations of TCE in Groundwater 6 Layout of the Soil Vapor Extraction System 7 Soil Vapor Extraction System Schematic Concentrations of Total VOCs versus Time: Blower Influent 8a 8b Concentrations of Total VOCs versus Time: SVE-1 Concentrations of Total VOCs versus Time: SVE-2 8c 8d Concentrations of Total VOCs versus Time: SVE-3 8e Concentrations of Total VOCs versus Time: SVE-D1 8f Concentrations of Total VOCs versus Time: VMP-D1 Concentrations of Total VOCs versus Time: VMP-D2 8g Concentrations of Total VOCs versus Time: VMP-1 8h

LIST OF APPENDICES

Cumulative VOC Removal

9

- A Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling
- B Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling
- C Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling

1. INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") is pleased to present this *Quarterly Progress Report, April through June 2001* for the property located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, California (collectively referred to as the "Site," see Figure 1). The work documented in this report was performed on behalf of the Jervis B. Webb Company of California ("Webb"). The property at 5030 Firestone Boulevard is owned by Webb and the adjacent property at 9301 Rayo Avenue is owned by Reliable Steel Building Products, Inc. ("Reliable Steel").

The principal objectives of the activities performed during this quarter were to (1) monitor the groundwater wells at the Site, and (2) continue operation of the soil vapor extraction ("SVE") system at the Site. The quarterly groundwater monitoring activities described herein were performed in accordance with the procedures described in *Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property* by EKI, dated 29 September 1998. The SVE activities described herein were performed in accordance with the *Work Plan for Clarifier Removal and Soil Remediation by Soil Vapor Extraction* by EKI, dated 14 April 1999 ("SVE Work Plan"). The California Regional Water Quality Control Board, Los Angeles Region ("RWQCB") approved the SVE Work Plan, with two modifications, in its letter to Webb dated 18 May 1999.

2. QUARTERLY GROUNDWATER MONITORING

2.1. Measurements of Groundwater Elevation

The depth to groundwater in each of the five groundwater monitoring wells at the Site was measured on 24 April and 5 June 2001 (see Figure 2 for well locations). These data are provided in Table 1. The depth to the groundwater table beneath the Site is approximately 45 feet below ground surface ("ft bgs"). Contours representing the elevation of the groundwater table on 24 April and 5 June 2001 are shown on Figures 3 and 4, respectively. As inferred from the contours shown on these figures, the primary direction of groundwater flow in the groundwater table aquifer beneath the Site appears to be toward the south-southeast.

2.2. Groundwater Sampling

Samples of groundwater were collected from each of the five groundwater monitoring wells at the Site on 5 June 2001. In addition, a duplicate sample of groundwater was collected from well MW-5. All samples of groundwater were submitted to Orange Coast Analytical, Inc. in Tustin, California, for analyses of volatile organic compounds ("VOCs") using United States Environmental Protection Agency ("EPA") Method 8260B, total arsenic using EPA Method 206.2, and California Code of Regulations ("CCR") metals, including hexavalent chromium, using EPA Methods 200.7, 218.4, and 245.1. The analytical results for VOCs and metals detected in groundwater samples collected during this monitoring event are summarized in Tables 2 and 3, respectively.

2.2.1. Groundwater Sampling Procedures

Prior to sampling of groundwater, each well was purged of a minimum of three well-casing volumes of groundwater using a submersible, electric pump. Groundwater purging was performed by West Hazmat Drilling Corp. ("West Hazmat") of Anaheim, California and groundwater samples were collected by EKI. All down-hole equipment was thoroughly steam cleaned before use at each well.

During purging of the monitoring wells on 5 June 2001, the temperature, pH, conductivity, and turbidity of the purged groundwater were recorded by EKI. The instruments used for monitoring the purged groundwater were calibrated prior to commencement of groundwater purging. For each groundwater monitoring well, the time, water quality parameters, and volume of purged groundwater were recorded on forms in the field (see Appendix A). Purging at each well continued until the variability of the monitored groundwater quality parameters stabilized to within approximately ten percent. Groundwater quality parameters were generally stable after purging three casing volumes of water from each well. The final

2

turbidity of the purged groundwater ranged from 0.14 to 4.9 nephelometric turbidity units (see Appendix A).

A groundwater sample was collected from each monitoring well using a disposable polyethylene bailer. A new bailer was used to collect the sample from each well. A sample label that included a unique sample identification number, the time, and the date when the sample was collected was attached to each sample container. Sample containers were sealed in zip-lock plastic bags and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Chain-of-Custody forms were initiated in the field and stored with the samples. Laboratory reports and Chain-of-Custody forms for groundwater samples are attached in Appendix B.

2.2.2. Analytical Results for Groundwater Samples

2.2.2.1. Volatile Organic Compounds

Trichloroethene ("TCE"), cis-1,2-dichloroethene ("c-1,2-DCE"), and tetrachloroethene ("PCE") were the only VOCs detected in the samples of groundwater collected at the Site on 5 June 2001 (see Table 2). The concentrations of TCE detected in the samples of groundwater collected at the Site are shown on Figure 6. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (31,000 micrograms per liter ("ug/L") in well MW-1). The concentrations of TCE (<0.5 to 31,000 ug/L), c-1,2-DCE (<0.5 to 350 ug/L), and PCE (<0.5 to 150 ug/L) detected in samples of the groundwater collected at the Site during June 2001 were within the ranges of concentrations detected during previous monitoring at the Site (see Table 2). No VOCs were detected in the sample of groundwater collected from downgradient monitoring well MW-4.

2.2.2.2. <u>Metals</u>

As requested by the RWQCB in its meeting with Webb on 8 February 2001, the samples of groundwater collected at the Site during June 2001 were analyzed for CCR metals. Each sample of groundwater was filtered at the analytical laboratory prior to analysis for metals. Arsenic (0.027 to 0.32 milligrams per liter or "mg/L"), barium (0.030 to 0.32 mg/L), molybdenum (<0.05 to 0.95 mg/L), and zinc (0.016 to 0.024 mg/L) were the only metals detected in the samples of groundwater collected at the Site on 5 June 2001 (see Table 3). No other metals, including chromium, were detected in the samples of groundwater collected from the monitoring wells at the Site.

2.2.3. Quality Assurance/Quality Control

Standard laboratory QA/QC procedures used for the project included analyses of matrix spikes, matrix spike duplicates, a quality control standards, and method blanks. The percent recoveries of the matrix spike, matrix spike duplicate, and the quality control standards were

3

within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. QA/QC results are provided with the laboratory reports in Appendix B.

A duplicate groundwater sample was collected from monitoring well MW-5 (see Tables 2 and 3). Two VOCs (TCE and c-1,2-DCE) and four metals (total arsenic, barium, molybdenum, and zinc) were detected in both of the samples of groundwater collected from well MW-5. The relative percentage differences ("RPDs") for these analytes ranged between zero and 64 percent. The only RPDs above 25 percent were those for barium (64 percent) and zinc (43 percent), both of which were detected at low concentrations. The RPDs indicate an acceptable range of sampling and analytical reproducibility.

An equipment rinsate blank also was collected and analyzed during the groundwater sampling event on 5 June 2001. Following the sampling of well MW-5 and steam cleaning of the purge pump, the equipment rinsate blank was collected by pouring water over the pump into sample containers. The rinse water was provided by West Hazmat from an offsite source. A sample of the rinse water also was submitted to the analytical laboratory for analysis. The equipment rinsate blank and the sample of rinse water were analyzed for VOCs using EPA Method 8260B. The concentrations of chemicals detected in the equipment rinsate blank were 5.8 ug/L of bromoform, 3.4 ug/L of methyl tert-butyl ether ("MTBE"), and 1.1 ug/L of chlorodibromomethane. These chemicals were not detected above method detection limits in any of the groundwater samples collected from the monitoring wells.

Due to these detections in the equipment rinsate blank, the rinse water sample was analyzed on 13 June 2001 in an effort to identify the source of the VOCs. The concentrations of chemicals detected in the rinsate water sample were 6.7 ug/L of bromoform, 4.5 ug/L of MTBE, and 1.6 ug/L of chlorodibromomethane. All of the chemicals detected in the rinsate blank sample were also detected in the rinsate water sample, with the concentration of each chemical greater in the rinsate water sample than in the rinsate blank sample. Therefore, it appears that the source of the VOCs detected in the equipment rinsate blank was the rinse water used to prepare the samples. However, as none of the chemicals detected in the equipment rinsate blank and rinsate water samples were detected above method detection limits in any of the groundwater samples collected at the Site, it does not appear that the rinse water affected the integrity of the groundwater samples.

3. SOIL REMEDIATION

3.1. Description of the Soil Vapor Extraction System

3.1.1. Soil Vapor Wells

Four soil vapor extraction wells and four soil vapor monitoring probes were installed at the Site during June 1999 (see Figure 7). The wells and probes were designed to allow for vapor extraction and monitoring in both the shallow and deep vadose zones at the Site. All of the wells were constructed using Schedule 40 PVC casing and screen. More detailed descriptions of well construction and subsurface conditions at the Site are contained in reports previously provided to the RWQCB (see EKI, 14 April 1999; EKI, 13 October 1999).

On 29 June 2000, two of the soil vapor monitoring probes (VMP-D1 and VMP-D2) were converted to extraction wells by connecting the probes to the soil vapor extraction system at the Site with two-inch diameter PVC pipe. These wells have been used as extraction wells during system operation since 6 July 2000. On 8 March 2001, vapor monitoring probe VMP-1 was converted to an extraction well by connecting the probe to the soil vapor extraction system at the Site with a two-inch diameter hose. This well has been used as an extraction well during system operation since 8 March 2001.

Soil Vapor Extraction Wells: The four shallow vadose zone SVE wells (see locations SVE-1, SVE-2, SVE-3, and VMP-1 on Figure 7) are constructed with two-inch diameter PVC casing. Wells SVE-1, SVE-3, and VMP-1 have slotted screen from approximately 19 to 25 ft bgs, and have total depths of approximately 25 ft bgs. Well SVE-2 has slotted screen from approximately 18 to 24 ft bgs, and has a total depth of approximately 24 ft bgs.

The three deep vadose zone SVE wells are wells SVE-D1, VMP-D1, and VMP-D2. Well SVE-D1 is constructed with four-inch diameter PVC casing with slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 44 ft bgs. Deep vadose zone SVE wells VMP-D1 and VMP-D2 are constructed in the same boreholes with shallow vadose zone SVE wells SVE-2 and SVE-3, respectively, and are constructed with 2-inch diameter PVC casing. Well VMP-D1 has slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 43 ft bgs. Well VMP-D2 has slotted screen from approximately 31 to 41 ft bgs, and has a total depth of approximately 44 ft bgs.

<u>Soil Vapor Monitoring Probes</u>: The shallow vadose zone vapor monitoring probe (see location VMP-2 on Figure 7) is constructed with two-inch diameter PVC casing with slotted screen from approximately 19 to 25 ft bgs, and has a total depth of approximately 25 ft bgs.

3.1.2. Soil Vapor Extraction and Treatment System

Installation of the SVE system was completed at the Site during March 2000. Soil vapors from the extraction wells are passed through a condensate knock-out vessel and through a 200 cubic feet per minute ("cfm") blower (see Figure 8). The soil vapors are then passed through a heat exchanger and two 1,000-pound granular activated carbon ("GAC") vessels in series, with the treated vapors exhausted to the atmosphere under permit of the South Coast Air Quality Management District ("SCAQMD"). Valves on piping from each well and an ambient air inlet valve located ahead of the knockout vessel allow regulation of air extracted from the wells. PVC pipe and fittings are used throughout the system. Electrical power to the system is metered, and the system is enclosed in a fenced area.

Vacuum gauges, a hand-held flow meter, and sampling ports are used to monitor each of the vapor extraction wells. Vacuum is measured in inches of water column ("in-wc"), vapor flow rate is measured in actual cubic feet per minute ("acfm"), and concentrations of VOCs are measured in parts per million by volume ("ppmv"). Sampling ports were installed at each of the vapor wells and probes and several locations in the SVE system for monitoring of VOC concentrations.

3.2. Operation and Monitoring of the SVE System

3.2.1. System Operation

The SVE system began operating on 16 March 2000. Throughout this reporting period (i.e., April through June 2001), wells SVE-1, SVE-2, SVE-3, VMP-1, SVE-D1, VMP-D1, and VMP-D2 were used as vapor extraction wells. Operation and maintenance of the SVE system are performed by Drewelow Engineering of Encinitas, California ("Drewelow").

With the exception of planned system testing, SVE system at the Site was operated continuously during this reporting period. The SVE system was shut down on 31 May 2001 to allow static vapor sampling on 14 June 2001. Following the static vapor sampling and rebound testing of the system, the SVE system was restarted on 14 June 2001 and was in operation through the remainder of the reporting period. Excluding this planned shutdown planned shutdown, the SVE system at the Site operated nearly continuously between 1 April 2001 and 20 June 2001.

3.2.2. System Monitoring

The following parameters have been monitored during operation of the SVE system: vapor flow rate from the extraction wells; total vapor flow rate; vacuum (pressure) at the extraction wells and monitoring points; blower influent flow rate and vacuum; blower discharge flow rate, pressure, and temperature; and VOC concentrations in the extracted soil vapor. The water level in the knockout tank is also monitored. During this reporting period, water was observed in the piping of extraction well SVE-2 and the inlet manifold to the system blower.

Approximately 15 gallons of water were removed from the SVE system during this reporting period. Water removed from the SVE system is stored in 55-gallon drums and transported offsite for disposal and/or treatment.

Monitoring data collected at the inlet to the system blower prior to dilution with ambient air are presented in Table 4a and Figure 8a. Monitoring data collected at individual soil vapor extraction wells are presented in Tables 4b through 4h and Figures 8b through 8h. Field monitoring data for the soil vapor monitoring probes are presented in Table 5.

Prior to the planned shut down of the SVE system on 31 May 2001, flow rates in the four shallow zone extraction wells (SVE-1, SVE-2, SVE-3, and VMP-1) ranged from 2.3 to 10 acfm. The flow rates in the three deep zone extraction wells (SVE-D1, VMP-D1, and VMP-D2) ranged from 11 to 17 acfm at the end of the reporting period.

3.3. Soil Vapor Sampling

3.3.1. Vapor Well and System Influent Sampling

On 31 May and 14 June 2001, EKI collected soil vapor samples for laboratory analysis from the undiluted blower influent (i.e., the combined total influent of the SVE wells) and from each of the eight SVE wells and soil vapor monitoring probes at the Site. Duplicate soil vapor samples were collected from the undiluted blower influent on 31 May and 14 June 2001. Vapor extraction was occurring during the sampling event of 31 May 2001, whereas the samples of soil vapor collected on 14 June 2001 were collected under static conditions. The samples were collected in Tedlar bags using a purge/sampling pump connected to a sampling port with Teflon tubing. All samples were labeled with a unique sample identification number, and chain-of-custody forms were initiated at the time of sampling. All samples were analyzed for VOCs by Performance Analytical, Inc. of Simi Valley, California using EPA Method TO-14A. Analytical results for the samples are summarized in Table 6, and copies of the laboratory reports and chain-of-custody forms are provided in Appendix C.

The analytical results for samples of soil vapor collected during system operation are described below. The analytical results for the static vapor sampling event on 14 June 2001 are described in Section 3.4.

Shallow Vadose Zone: During this reporting period, several VOCs were detected at concentrations above method detection limits in soil vapor samples collected from SVE wells SVE-1, SVE-2, SVE-3, and VMP-1, and soil vapor monitoring probe VMP-2. However, the only VOCs detected at concentrations above method detection limits and 1 ppmv were TCE, PCE, and benzene (Table 6). No VOCs were detected above 1 ppmv in the sample of soil vapor collected from vapor monitoring probe VMP-2 on 31 May 2001.

Unlike previous sampling of the SVE system, the concentrations of VOCs detected in the samples of soil vapor collected from the shallow vadose zone extraction wells were similar for each well. During previous sampling events, VOC concentrations detected in samples collected from well SVE-1 were significantly higher than those detected in samples collected from the other shallow wells and probes (see Table 6). During the 31 May 2001 sampling event, the concentration ranges of TCE, PCE, and benzene detected in the samples of soil vapor collected from the shallow vadose zone wells were 5 to 10 ppmv, 1.2 to 3.3 ppmv and 0.83 to 2.4 ppmv, respectively.

The decrease in the VOC concentration gradients between soil vapor at extraction well SVE-1 and the other shallow vadose zone wells can be attributed to the continued decrease in VOC concentrations in soil vapor near well SVE-1. As shown in Table 6, the concentration of TCE detected in samples of soil vapor collected from well SVE-1 decreased 99.9 percent between startup of the SVE system on 16 March 2000 (10,000 ppmv) and the most recent sampling event on 31 May 2001 (7.8 ppmv), and 97 percent between 14 December 2000 (260 ppmv) and 31 May 2001 (see Figure 8b). The concentrations of VOCs detected in samples of soil vapor collected from extraction wells SVE-2 and SVE-3 have also decreased significantly during the course of the system operation (see Figures 8c and 8d). The decrease in VOC concentrations in soil vapor extracted from each of the shallow vadose zone wells to similarly low levels suggests that the SVE system at the Site has effectively remediated the shallow soil zones impacted by releases of VOCs.

<u>Deep Vadose Zone</u>: During this reporting period, several VOCs were detected at concentrations above method detection limits in samples of soil vapor collected from extraction wells SVE-D1, VMP-D1, and VMP-D2. However, the only VOCs detected at concentrations above 1 ppmv were TCE, PCE, and benzene (see Table 6). During the 31 May 2001 sampling event, TCE, PCE, and benzene were detected in the shallow zone wells at maximum concentrations of 11 ppmv, 3.8 ppmv and 2.7 ppmv, respectively. As shown on Figures 8f through 8h, the concentrations of VOCs detected in the samples of soil vapor collected from the deep zone wells have decreased to similarly low concentrations at each well location.

SVE Blower Influent: During this reporting period, several VOCs were detected at concentrations above method detection limits in soil vapor samples collected from the influent to the system blower. However, the only VOCs detected at concentrations above 1 ppmv were TCE, PCE, and benzene (Table 6). Between startup of the SVE system on 16 March 2000 and the system shutdown on 31 May 2001, the total concentration of VOCs detected in samples of blower influent decreased from 940 ppmv to 10 ppmv (i.e., a decrease of about 99 percent). During the most recent three monitoring events with the system operating, the concentrations of TCE, benzene, and PCE detected in samples of blower influent were relatively low (maximum concentrations of 7.0 ppmv, 4.1 ppmv, and 1.8 ppmv, respectively) and did not vary significantly (see Table 6). The decrease in the total concentration of VOCs detected in soil vapor samples collected from the blower influent during operation of the SVE system is illustrated on Figure 8a.

8

Quality Assurance/Quality Control ("QA/QC"): Standard laboratory QA/QC procedures used for the project included analyses of laboratory duplicates and method blanks. The relative percentage differences ("RPDs") of the laboratory duplicates were within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. Laboratory QA/QC results are provided with the laboratory reports in Appendix C.

Duplicate soil vapor samples were collected from the undiluted blower influent on 31 May and 14 June 2001 (see Table 6). The RPDs for TCE were 2.9 and 4.4 percent, respectively. These RPDs indicate an acceptable range of sampling and analytical reproducibility.

EKI collected equipment blanks during sampling activities on 31 May and 14 June 2001. The equipment blanks were collected by pumping ambient air into a tedlar bag using the purge/sampling pump, as described above. Concentrations of TCE detected in the equipment blanks ranged from 0.012 to 0.075 ppmv. The concentrations of TCE detected in vapor samples collected from the vapor wells, vapor probes, and blower influent were at least three times greater than the concentrations of TCE detected in the equipment blank samples.

3.3.2. Estimated VOC Removal Rates

Rates of VOC removal were estimated using measured vacuum readings, flow rates, and analytical data (see Tables 4a through 4h). In most cases, mass removal for a given period of time was calculated using an average of the mass removal rates at the beginning and end of the time period. Exceptions to this averaging method are noted in the tables.

Based on measurements made at the blower influent, it is estimated that 155 pounds of VOCs, including 121 pounds of TCE, have been extracted from soil at the Site as of 31 May 2001 (see Table 4a and Figure 9). It is estimated that 22 pounds of VOCs, including 13 pounds of TCE, were extracted from soil at the Site during the period from 14 December 2000 through 31 May 2001. Therefore, only about 14 percent of the cumulative mass removal by the SVE system occurred during the last five months of system operation. Approximately 55 percent of the mass removal during this reporting period occurred in the shallow vadose zone. The average total mass removal rate by the SVE system during this reporting period was approximately 0.21 pounds of VOCs per day. The daily mass removal rates by the SVE system do not appear to have changed significantly during the last nine months of system operation (see Table 4a). Thus, a relatively small, steady removal of VOCs occurred during this reporting period.

3.3.3. Soil Vapor Field Monitoring

Total VOC concentrations in soil vapor samples were also periodically monitored with an organic vapor meter, which utilizes a photoionization detector ("PID") to measure total concentrations of VOCs. The PID does not distinguish between individual compounds, but gives a reading for total VOCs. Samples for PID analyses were collected in Tedlar bags

using the method described in Section 3.3.1. The PID was calibrated with 100 ppmv of isobutylene. PID readings from soil vapor samples collected at the extraction wells and vapor monitoring probes are presented in Tables 4b through 4h and in Table 5. These data are plotted as a function of time on Figures 8b through 8h. The PID readings suggest that total VOC concentrations in the blower influent and each of the vapor wells decreased during this reporting period.

3.3.4. SCAQMD Compliance Monitoring

During this reporting period, the effluent of the treatment system was monitored with a PID on a weekly basis to demonstrate conformance with the limitations of the SCAQMD permit for the system. For treatment system monitoring, the PID was calibrated with 50 ppmv of hexane.

The vapor treatment components of the SVE system at the Site are owned by Drewelow Engineering, and the SCAQMD permit is held by Drewelow. Drewelow reports that effluent concentrations measured by the PID have been within the discharge limitations of the SCAQMD permit throughout the operation of the SVE system.

3.4. Static Vapor Sampling

As discussed in Section 3.2.1, the soil vapor extraction system at the Site was shut down once during this reporting period to allow collection of soil vapor samples from the extraction wells and monitoring probes under static conditions. Chemical analyses of the samples of soil vapor collected under static conditions are used to assess the progress and effectiveness of soil remediation at the Site. The SVE system was shut down on 31 May 2000 for a period of two weeks to allow collection of soil vapor samples. A summary of the TCE concentrations detected in static soil vapor samples collected from each well is presented below (see Table 6 and Figures 8b through 8h).

SVE-1: The concentrations of TCE detected in static vapor samples collected from shallow vadose zone well SVE-1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 were 10,000, 3,300, 230, 350, and 11 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 99.9 percent after 15 months of system operation.

SVE-2: The concentrations of TCE detected in static vapor samples collected from shallow vadose zone well SVE-2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 were 75, 120, 110, 34, and 22 ppmv, respectively. These concentrations indicate a 71 to 82 percent decrease in TCE concentration after 15 months of system operation. Although the laboratory data are inconsistent, mass removal estimates and field monitoring of total VOC concentrations with a hand-held PID suggest that most of the soil remediation at this location occurred during the first six months

of system operation, with less than two pounds of TCE removed during the period from December 2000 through May 2001 (see Table 4c and Figure 8c).

<u>SVE-3</u>: The concentrations of TCE detected in static vapor samples collected from shallow vadose zone well SVE-3 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 were 25, 7.4, 3.8, 1.4, and 1.6 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 94 percent after 15 months of system operation, with less than one pound of TCE removed since December 2000.

<u>VMP-1</u>: The concentrations of TCE detected in static vapor samples collected from shallow vadose zone well VMP-1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 are 29, 0.13, 0.47, 0.93, and 0.27 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 99 percent after 15 months of system operation, and that the concentration of TCE has not changed significantly at this location during the last 11 months of system operation.

<u>VMP-2</u>: The concentrations of TCE detected in static vapor samples collected from shallow vadose zone well VMP-2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 are 43, 5.2, 0.52, 0.13, and 0.23 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 99 percent after 15 months of system operation, and that the concentration of TCE has not changed significantly at this location during the last nine months of system operation.

<u>SVE-D1</u>: The concentrations of TCE detected in static vapor samples collected from deep vadose zone well SVE-D1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 are 1,000, 92, 120, 41, and 140 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 86 percent decrease after 15 months of system operation, and that the concentration of TCE has not changed significantly at this location during the last 11 months of system operation.

<u>VMP-D1</u>: The concentrations of TCE detected in static vapor samples collected from deep vadose zone well VMP-D1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 are 460, 9.4, 8.6, 1.6, and 5.7 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately 99 percent after 15 months of system operation, and that the concentration of TCE has not changed significantly at this location during the last nine months of system operation.

<u>VMP-D2</u>: The concentrations of TCE detected in static vapor samples collected from deep vadose zone well VMP-D2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, 4 January 2001, and 14 June 2001 are 39, 5.7, 9.3, 3.0, and 5.4 ppmv, respectively. These data indicate that the concentration of TCE has decreased approximately

86 percent after 15 months of system operation, and that the concentration of TCE did not change significantly at this location during the last 11 months of system operation.

3.5. Request for Closure of Soil Remediation Activities at the Site

In a previous progress report for the Site (EKI, 5 February 2001), it was concluded that the SVE system at the Site had achieved appropriate conditions for closure of soil remediation activities at the Site. As presented in this progress report, continued monitoring of the SVE system from December 2000 through June 2001 has provided additional data indicating that sufficient remediation of VOCs in soil at the Site has occurred to proceed with confirmation sampling and closure of the SVE system.

The data presented above in Sections 3.3 and 3.4 indicate that substantial remediation of vadose zone soil has occurred during operation of the SVE system at the Site, and that the concentrations of VOCs in soil gas beneath the Site have stabilized at low levels relative to the concentrations measured at the time of system startup. As shown on Figures 8a through 8h, the total concentrations of VOCs in the system blower influent and in the soil vapor extraction and monitoring wells at the Site have decreased asymptotically. The total VOC concentration asymptotes for the system blower influent and the soil vapor extraction and monitoring wells are about 80 to 99 percent lower than the concentrations measured at the time of system startup in March 2000. As discussed above in Section 3.3, the VOC concentration gradients have dissipated in the shallow vadose zone, and roughly equal amounts of VOCs are currently being extracted from the shallow and deep vadose zones. In addition, mass removal estimates and field monitoring data for the SVE system suggest that over 85 percent of the soil remediation occurred during the first nine months of system operation. These data indicate that the concentrations of VOCs in soil gas beneath the Site are not likely to decrease significantly with continued operation of the SVE system.

As shown in Figure 9 and Table 4a, the rate of VOC mass removal by the SVE system at the Site also has decreased to a low, stable value. Based on measurements made at the blower inlet, it is estimated that 22 pounds of VOCs, including 13 pounds of TCE, were extracted from soil at the Site during the last five months of system operation. This represents only about 14 percent of the cumulative mass removal by the SVE system. The average mass removal rates during the last nine months of system operation were approximately 80 percent lower than the mass removal rates during the initial six months of system operation. Moreover, the daily mass removal rates by the SVE system do not appear to have changed significantly during the last nine months of system operation. Thus, the rate of VOC mass removal by the SVE system has reached a low and stable level that does not warrant additional soil vapor extraction at the Site.

The data presented above indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb intends to

12

Erler & Kalinowski, Inc.

proceed with confirmation sampling of soil and closure of the SVE system at the Site upon RWQCB approval of the work plan describing the proposed soil closure activities.

4. SUMMARY

Gauging of the depth to the groundwater table was performed at the groundwater monitoring wells at the Site on 24 April and 5 June 2001. On the basis of these measurements, the predominant direction of groundwater flow appears to be toward the south-southeast under both the Webb and Reliable Steel properties. This estimated direction of groundwater flow is consistent with previous groundwater monitoring at the Site.

The only VOCs detected in the samples of groundwater collected at the Site on 5 June 2001 were TCE, c-1,2-DCE, and PCE. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (31,000 ug/L in well MW-1). The concentrations of TCE, c-1,2-DCE, and PCE detected in samples of the groundwater collected at the Site during June 2001 were within the ranges of concentrations detected during previous monitoring at the Site. No VOCs were detected in the sample of groundwater collected from downgradient monitoring well MW-4.

As requested by the RWQCB in its meeting with Webb on 8 February 2001, the samples of groundwater collected at the Site during June 2001 were analyzed for CCR metals. Arsenic (0.027 to 0.32 mg/L), barium (0.030 to 0.32 mg/L), molybdenum (<0.05 to 0.95 mg/L), and zinc (0.016 to 0.024 ug/L) were the only metals detected in the samples of groundwater collected at the Site on 5 June 2001. No other metals, including chromium, were detected in the samples of groundwater collected from the monitoring wells at the Site.

The data presented in this progress report indicate that substantial remediation of vadose zone soil has occurred during operation of the SVE system at the Site, and that the concentrations of VOCs in soil gas beneath the Site have stabilized at low levels relative to the concentrations measured at the time of system startup. The total concentrations of VOCs in the system blower influent and in the soil vapor extraction and monitoring wells at the Site have decreased asymptotically. The total VOC concentration asymptotes for the system blower influent and the soil vapor extraction and monitoring wells are about 80 to 99 percent lower than the concentrations measured at the time of system startup in March 2000. The VOC concentration gradients have dissipated in the shallow vadose zone, and roughly equal amounts of VOCs are currently being extracted from the shallow and deep vadose zones. In addition, mass removal estimates and field monitoring data for the SVE system suggest that over 85 percent of the soil remediation occurred during the first nine months of system operation. These data indicate that the concentrations of VOCs in soil gas beneath the Site are not likely to decrease significantly with continued operation of the SVE system.

The rate of VOC mass removal by the SVE system at the Site also has decreased to a low, stable value. Based on measurements made at the blower inlet, it is estimated that 22 pounds

of VOCs, including 13 pounds of TCE, were extracted from soil at the Site during the last five months of system operation. This represents only about 14 percent of the cumulative mass removal by the SVE system. The average mass removal rates during the last nine months of system operation were approximately 80 percent lower than the mass removal rates during the initial six months of system operation. Moreover, the daily mass removal rates by the SVE system do not appear to have changed significantly during the last nine months of system operation. Thus, the rate of VOC mass removal by the SVE system has reached a low and stable level that does not warrant additional soil vapor extraction at the Site.

The data presented in this progress report indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb intends to proceed with confirmation sampling of soil and closure of the SVE system at the Site upon RWQCB approval of the work plan describing the proposed soil closure activities.

5. REFERENCES AND PREVIOUS REPORTS

Erler & Kalinowski, Inc., 30 April 2001. Quarterly Progress Report for January through March 2001 for the Jervis B. Webb Company of California Property, 5030 Firestone Boulevard, South Gate, California.

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TABLE 1
Groundwater Elevations in Monitoring Wells

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-1	2/27/98	106.09	44.79	61.30	
	3/2/98	106.09	44.82	61.27	
	3/4/98	106.09	44.58	61.51	
	4/8/98	106.09	44.57	61.52	
	5/20/98	106.09	43.99	62.10	
	10/8/98	106.09	43.38	62.71	
	11/5/98	106.09	43.14	62.95	
	12/21/98	106.09	43.37	62.72	
	1/19/99	106.09	43.26	62.83	
	2/3/99	106.09	42.98	63.11	
	3/30/99	106.09	43.22	62.87	
	6/1/99	106.09	43.48	62.61	•
	7/29/99	106.09	43.82	62.27	
	9/1/99	106.09	43.76	62.33	
	9/23/99	106.09	44.03	62.06	
	10/18/99	106.09	44.43	61.66	
	12/8/99	106.09	44.55	61.54	
	1/27/00	106.09	44.40	61.69	
	2/28/00	106.09	44.34	61.75	
	3/15/00	106.09	44.06	62.03	
	4/13/00	106.09	44.73	61.36	
	5/18/00	106.09	44.58	61.51	
	6/20/00	106.09	44.60	61.49	
	7/13/00	106.09	45.17	60.92	
	8/17/00	106.09	45.30	60.79	
	9/7/00	106.09	45.15	60.94	
	10/26/00	106.09	45.87	60.22	
	11/21/00	106.09	45.60	60.49	
	12/5/00	106.09	45.72	60.37	
	1/4/01	106.09	45.67	60.42	
	2/22/01	106.09	45.43	60.66	
	3/8/01	106.09	45.09	61.00	
	4/24/01	106.09	45.75	60.34	
	6/5/01	106.09	45.52	60.57	

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-2	2/27/98	106.65	44.02	62.63	
	3/2/98	106.65	44.06	62.59	
	3/4/98	106.65	44.13	62.52	
	4/8/98	106.65	NR		Truck parked on well.
	5/20/98	106.65	43.51	63.14	
	10/8/98	106.65	42.84	63.81	
	11/5/98	106.65	42.64	64.01	
	12/21/98	106.65	42.6 9	63.96	
	1/19/99	106.65	42.66	63.99	
	2/3/99	106.65	42.55	64.10	
	3/30/99	106.65	42.63	64.02	
	6/1/99	106.65	42.91	63.74	
	7/29/99	106.65	43.13	63.52	
	9/1/99	106.65	43.14	63.51	
	9/23/99	106.65	43.35	63.30	
	10/18/99	106.65	43.60	63.05	
	12/8/99	106.65	43.62	63.03	
	1/27/00	106.65	43.86	62.79	
	2/28/00	106.65	43.86	62.79	
	3/15/00	106.65	43.62	63.03	
	4/13/00	106.65	43.92	62.73	
	5/18/00	106.65	43.50	63.15	
	6/20/00	106.65	43.48	63.17	
	7/13/00	106.65	43.29	63.36	
	8/17/00	106.65	43.38	63.27	
	9/7/00	106.65	44.30	62.35	
	10/26/00	106.65	44.74	61.91	
	11/21/00	106.65	44.52	62.13	
	12/5/00	106.65	44.51	62.14	
	1/4/01	106.65	44.55	62.10	
	2/22/01	106.65	43.91	62.74	
	3/8/01	106.65	43.25	63.40	
	4/24/01	106.65	44.64	62.01	
	6/5/01	106.65	44.50	62.15	

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-3	2/27/98	105.87	44.55	61.32	
	3/2/98	105.87	44.56	61.31	
	3/4/98	105.87	44.40	61.47	
	4/8/98	105.87	44.39	61.48	
	5/20/98	105.87	43.80	62.07	
	10/8/98	105.87	43.26	62.61	
	11/5/98	105.87	43.60	62.27	
	12/21/98	105.87	43.33	62.54	
	1/19/99	105.87	43.18	62.69	
	2/3/99	105.87	42.97	62.90	
	3/30/99	105.87	, 43.19	62.68	
	6/1/99	105.87	43.58	62.29	
	7/29/99	105.87	43.85	62.02	
	9/1/99	105.87	43.90	61.97	
	9/23/99	105.87	44.10	61.77	
	10/18/99	105.87	44.37	61.50	
	12/8/99	105.87	44.64	61.23	
	1/27/00	105.87	44.69	61.18	
	2/28/00	105.87	44.75	61.12	
	3/15/00	105.87	44.41	61.46	
	4/13/00	105.87	44.86	61.01	
	5/18/00	105.87	44.94	60.93	
	6/20/00	105.87	44.88	60.99	
	7/13/00	105.87	45.25	60.62	
	8/17/00	105.87	45.06	60.81	
	9/7/00	105.87	44.83	61.04	
	10/26/00	105.87	45.94	59.93	
	11/21/00	105.87	46.00	59.87	
	12/5/00	105.87	45.77	60.10	
	1/4/01	105.87	45.89	59.98	
	2/22/01	105.87	45.53	60.34	
	3/8/01 105.87		45.21	60.66	
	4/24/01	105.87	45.72	60.15	
	6/5/01	105.87	45.74	60.13	

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6 July 2001

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-4	11/3/98	104.72	42.77	61.95	Well Developed
	11/5/98	104.72	42.64	62.08	
	12/21/98	104.72	42.93	61.79	
	1/19/99	104.72	42.80	61.92	
	2/3/99	104.72	42.63	62.09	
	3/30/99	104.72	42.89	61.83	
	6/1/99	104.72	43.28	61.44	
	7/29/99	104.72	43.63	61.09	
	9/1/99	104.72	43.70	61.02	
	9/23/99	104.72	43.96	60.76	
	10/18/99	104.72	44,22	60.50	,
	12/8/99	104.72	44.48	60.24	
	1/27/00	104.72	44.70	60.02	
	2/28/00	104.72	NR		Truck parked on well.
	3/15/00	104.72	44.37	60.35	
	4/13/00	104.72	NR		Truck parked on well.
	5/18/00	104.72	44.81	59.91	
	6/20/00	104.72	44.94	59.78	
	7/13/00	104.72	45.10	59.62	
	8/17/00	104.72	45.36	59.36	
	9/7/00	104.72	45.31	59.41	
	10/26/00	104.72	45.89	58.83	
	11/21/00	104.72	45.86	58.86	
	12/5/01	104.72	45.71	59.01	
	1/4/01	104.72	45.79	58.93	
	2/22/01	104.72	45.49	59.23	
	3/8/01	104.72	45.62	59.10	
	4/24/01	104.72	45.68	59.04	
	6/5/01	104.72	45.80	58.92	

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-5	11/3/98	106.13	43.32	62.81	Well Developed
	11/5/98	106.13	43.30	62.83	
	12/21/98	106.13	43.58	62.55	
	1/19/99	106.13	43.46	62.67	
	2/3/99	106.13	43.20	62.93	
į	3/30/99	106.13	43.49	62.64	
	6/1/99	106.13	43.88	62.25	
	7/29/99	106.13	44.19	61.94	
	9/1/99	106.13	44.22	61.91	
	9/23/99	106.13	44.48	61.65	
	10/18/99	106.13	44.72	61.41	,
	12/8/99	106.13	44.98	61.15	·
	1/27/00	106.13	45.17	60.96	
	2/28/00	106.13	45.15	60.98	
	3/15/00	106.13	44.87	61.26	
	4/13/00	106.13	45.22	60.91	
	5/18/00	106.13	45.29	60.84	
	6/20/00	106.13	45.30	60.83	
	7/13/00	106.13	45.63	60.50	
	8/17/00	106.13	45.85	60.28	
	9/7/00	106.13	45.69	60.44	
	10/26/00	106.13	46.35	59.78	
	11/21/00	106.13	46.33	59.80	
	12/5/00	106.13	46.16	59.97	
	1/4/01	106.13	46.26	59.87	
	2/22/01	106.13	46.00	60.13	
	3/8/01	106.13	45.95	60.18	
	4/24/01	106.13	46.19	59.94	
	6/5/01	106.13	46.30	59.83	

NOTES:

ft msl = feet above mean sea level

ft bgs = feet beneath ground surface

NR = Not Recorded

- -- Not Applicable
- 1. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
- 2. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

Erler & Kalinowski, Inc.

6 July 2001

TABLE 2 Results of VOCs Detected in Groundwater Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample		·		Analyte C	Concentrat	ion (ug/L)			
Well ID	Sample Number	Date	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE
MW-1	MW-1-0304	3/4/98	<100	<100	<100	220	<100	130	<100	140	24,000
	MW-1-0304DUP	3/4/98	<100	<100	<100	210	<100	150	<100	160	25,000
	MW-1-0520	5/20/98	<125	<125	<125	160	<125	130	<125	<125	24,000
	MW-1	11/5/98	<125	<125	<125	140	<125	160	<125	170	28,000
	MW-1	2/3/99	<125	<125	<125	130	<125	160	<125	160	27,000
	MW-1	6/1/99	<100	<100	<100	140	<100	190	<100	160	28,000
	MW-1	9/1/99	<100	<100	140	220	<100	200	<100	190	32,000
	MW-1	12/8/99	<250	<250	<250	<250	<250	<250	<250	<250	30,000
	MW-1-A ⁽³⁾	12/8/99	<100	<100	110	150	<100	200	<100	160	33,000
	MW-1	3/15/00	<100	<100	<100	160	<100	230	<100	150	30,000
	MW-1	6/20/00	<100	<100	<100	<100	<100	<100	<100	<100	24,000
	MW-1	9/7/00	<100	<100	<100	<100	<100	<100	<100	<100	21,000
	MW-1	12/5/00	<100	<100	<100	<100	<100	<100	<100	<100	30,000
	MW-1	3/8/01	<100	<100	<100	<100	<100	<100	<100	<100	23,000
	MW-1	6/5/01	<125	<125	<125	<125	<125	<125	<125	150	31,000
MW-2	MW-2-0304	3/4/98	<10	<10	13	34	<10	65	<10	<10	2,700
	MW-2-0520	5/20/98	<10	<10	14	38 1	<10	68	<10	<10	3,000
	MW-2	11/5/98	<10	<10	13	36	<10	68	<10	<10	3,200
	MW-2	2/3/99	<10	<10	13	36	<10	70	<10	<10	3,200
	MW-2	6/1/99	<10	<10	12	34	<10	68	<10	<10	2,800
	MW-2	9/1/99	<10	<10	16	49	<10	72	<10	<10	3,100
	MW-2	12/8/99	<13	<13	<13	<13	<13	57	<13	<13	2,400
	MW-2-A ⁽³⁾	12/8/99	<10	<10	12	22	<10	63	<10	<10	2,600
	MW-2	3/15/00	<10	<10	<10	<10	<10	74	<10	<10	2,800
	MW-2	6/20/00	<10	<10	<10	<10	<10	46	<10	<10	2,000
	MW-2	9/7/00	<10	<10	<10	<10	<10	42	<10	<10	1,800
	MW-2	12/5/00	<10	<10	<10	<10	<10	50	<10	<10	2,300
	MW-2	3/8/01	<10	<10	<10	<10	<10	44	<10	<10	1,800
	MW-2-DUP	3/8/01	<10	<10	<10	<10	<10	42	<10	<10	1,600
	MW-2	6/5/01	<10	<10	<10	<10	<10	47	<10	<10	2,300

TABLE 2 Results of VOCs Detected in Groundwater Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	<u> </u>	Sample			·	Analyte C	Concentrat	ion (ug/L)			
Well ID	Sample Number	Date	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE
MW-3	MW-3-0304	3/4/98	<10	13	14	82	<10	200	<10	<10	2,800
	MW-3-0520	5/20/98	<10	<10	13	58	<10	230	15	<10	2,800
	MW-3	11/5/98	<10	<10	11	66	<10	240	18	<10	2,300
	MW-3	2/3/99	<10	<10	11	64	<10	220	18	<10	2,000
	MW-3	6/1/99	<10	<10	11	66	53	240	18	<10	1,900
	MW-3	9/1/99	<10	<10	13	80	<10	270	20	<10	2,600
	MW-3	12/8/99	<13	<13	<13	<13	<13	220	<13	<13	2,500
	MW-3-A ⁽³⁾	12/8/99	<10	<10	13	55	<10	240	19	<10	2,900
	MW-3	3/15/00	<10	<10	11	61	<10	300	20	<10	3,100
	MW-3	6/20/00	<10	<10	10	<10	<10	170	14	<10	1,900
	MW-3-DUP	6/20/00	<10	<10	11	<10	<10	200	16	<10	2,100
	MW-3	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700
	MW-3-DUP	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700
	MW-3	12/5/00	<10	<10	<10	<10	<10	200	<10	<10	2,400
	MW-3-DUP	12/5/00	<10	<10	20	<10	<10	210	<10	<10	2,500
	MW-3	3/8/01	<10	<10	<10	55	<10	200	<10	<10	1,700
	MW-3	6/5/01	<10	<10	<10	<10	<10	210	<10	<10	2,300
MW-4	MW-4	11/5/98	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	6.7
	MW-4	2/3/99	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5
	MW-4	6/1/99	<0.5	<0.5	<0.5	<0.5	65	1.1	<0.5	<0.5	0.90
	MW-4	9/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	12/8/99	1,2	<0.5	<0.5	<0.5	<0.5	4.1	1.0	<0.5	17
	MW-4-A ⁽³⁾	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.6	1.1	<0.5	18
	MW-4	3/15/00	77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.68
	MW-4	6/20/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	9/7/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	12/5/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	3/8/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	6/5/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 2 Results of VOCs Detected in Groundwater Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Sample				Analyte C	oncentrat	ion (ug/L)			
Well ID	Sample Number	Date	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE
MW-5	MW-5	11/5/98	<25	<25	<25	42	<25	380	30	<25	5,000
	MW-5-DUP	11/5/98	<25	<25	<25	40	<25	360	29	<25	4,800
	MW-5	2/3/99	<25	<25	<25	49	<25	420	35	<25	5,100
	MW-5-DUP	2/3/99	<25	<25	<25	45	<25	370	31	<25	4,500
	MW-5	6/1/99	<25	<25	<25	52	35	420	36	<25	5,500
	MW-5-DUP	6/1/99	<25	<25	<25	56	39	430	35	<25	5,300
	MW-5	9/1/99	<25	<25	<25	40	<25	420	45	<25	5,500
	MW-5-DUP	9/1/99	<25	<25	<25	69	<25	440	45	<25	6,000
	MW-5	12/8/99	<50	<50	<50	< 50	<50	390	<50	<50	5,100
	MW-5-A ⁽³⁾	12/8/99	<25	<25	<25	<25	<25	410	25	<25	5,300
	MW-5-DUP	12/8/99	<50	<50	<50	<50	<50	360	<50	<50	5,000
	MW-5-DUP-A ⁽³⁾	12/8/99	<25	<25	<25	<25	<25	410	26	<25	5,300
	MW-5	3/15/00	<50	<50	<50	<50	<50	440	<50	<50	5,500
	MW-5-DUP	3/15/00	<50	<50	<50	<50	<50	450	<50	<50	5,800
	MW-5	6/20/00	<25	<25	<25	<25	<25	350	<25	<25	4,400
	MW-5	9/7/00	<10	<10	<10	<10	<10	280	<10	<10	3,700
	MW-5	12/5/00	<10	<10	<10	<10	<10	190	<10	<10	4,700
	MW-5	3/8/01	<25	140	<25	<25	<25	260	<25	<25	3,600
	MW-5	6/5/01	<25	<25	<25	<25	<25	340	<25	<25	5,400
	MW-5-DUP	6/5/01	<25	<25	<25	<25.	<25	350	<25	<25	5,400

NOTES:

1,1-DCA = 1,1-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,2-DCA = 1,2-dichloroethane

c-1,2-DCE = cis-1,2-dichloroethene

t-1.2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

ug/L = micrograms per liter

- 1. Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs.
- 2. < indicates that the analyte was not detected at a concentration above the indicated method detection limit.
- 3. Samples collected on 8 December 1999 were initially analyzed on 9 December 1999 and were re-analyzed on 17 December 1999 in an attempt to achieve lower method detection limits.

TABLE 3 Additional Analytical Results for Groundwater Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample			Analyte	Concentratio	n (mg/L)		
well in	Sample Number	Date	Arsenic	Barium	Chromium	Chromium VI	Molybdenum	Zinc	TDS
MW-1	MW-1-0520	5/20/98		- -					1,500
	MW-1	3/8/01	0.32	0.13	<0.01	<0.01	0.47	0.016	
	MW-1	6/5/01	0.32	0.25	<0.01	<0.01	0.45	0.024	
MW-2	MW-2-0520	5/20/98							2,500
	MW-2	3/8/01	0.0066	0.019	<0.01	<0.01	1.1	0.015	
	MW-2-DUP	3/8/01	0.0056	0.019	<0.01	<0.01	1.1	0.014	
	MW-2	6/5/01	0.039	0.090	<0.01	<0.01	0.95	0.016	
MW-3	MW-3-0520	5/20/98							1,100
	MW-3	3/8/01	0.080	0.15	<0.01	<0.01	0.71	0.012	
	MW-3	6/5/01	0.11	0.32	<0.01	<0.01	0.79	0.023	
MW-4	MW-4	3/8/01	0.0079	0.027	<0.01	<0.01	<0.05	0.025	
	MW-4	6/5/01	0.027	0.030	<0.01	<0.01	<0.05	0.020	
MW-5	MW-5	3/8/01	0.19	0.15	<0.01	<0.01	0.84	0.014	
	MW-5	6/5/01	0.15	0.16	<0.01	<0.01	1.1	0.011	
	MW-5-DUP	6/5/01	0.19	0.31	<0.01	<0.01	0.92	0.017	

NOTES:

TDS = total dissolved solids

mg/L = milligrams per liter

-- indicates not analyzed

Total Arsenic by EPA Method 206.2, CCR Metals by EPA Methods 200.7, 218.4, and 245.1, and TDS by EPA Method 160.1.

2. < indicates that the analyte was not detected at a concentration above the indicated method detection limit.

^{1.} The following analyses were performed by Orange Coast Analytical, Inc., in Tustin, California:

TABLE 4a Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed Time on		Fle	ow		Total	TCE		nated emoval		ulative N Removal	
Date	Time	Hour Meter (hrs)	Operation Time	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	startup c	n 3/16/00 a	16:00.									
3/16/00	16:45	5.6	0%	4.5	4.1	35	2,000+	860	1.8	1.9	0	0	
3/17/00	7:00	20	100%	5.2	4.7	37	94	-					
3/18/00	6:30	45	100%	5.4	4.9	38	128	-					
	System	shut dov	vn on 3/18/0	0 at 9:4	lo. Syst	tem restar	ted on 3	3/19/00 at	t 6:30.				
3/19/00	6:30	48	13%	6.1	5.53	38	103	-					
3/20/00	6:30	72	100%	8.6	7.7	43	145	-					
3/21/00	7:00	96	100%	4.8	4.1	60	745	- ,				,	
3/22/00	7:30	121	100%	11	10	15	173	490	2.5	2.6	10	11	4A
3/30/00	11:00	316	100%	20	18	45	39	-					
4/6/00	11:00	483	100%	25	17	125	42	-					
4/13/00	8:00	648	100%	21	13	150	42	70	0.45	0.51	43	45	4A
4/20/00	7:30	815	100%	21	13	145	43	-					
4/27/00	7:00	983	100%	16	10	150	30	-		1			
5/4/00	8:30	1,152	100%	16	10	150	20	-					
5/11/00	6:30	1,318	100%	14	9.0	150	20	-					
5/18/00	7:00	1,486	100%	19	12	150	38	53	0.32	0.34	56	60	4A
				28	18	150	38	-	0.47	0.50	-	-	
5/25/00	6:30	1,654	100%	18	12	150	19	-					
6/1/00	6:30	1,822	100%	18	11	150	34	-					
6/8/00	7:00	1,990	100%	26	16	155	27	-					
6/15/00	7:30	2,158	100%	26	16	150	28	-					
Ì	System	shut dov	wn on 6/21/0	00 at 17	:30. Sy	stem resta	arted on	7/6/00 a	t 10:00.				
7/6/00	10:23	2,312	30%	142	97	130	20	37	1.8	2.1	72	77	4B
7/13/00	12:00	2,485	102%	122	79	145	23	18	0.70	1.0	81	88	4A
7/20/00	7:30	2,648	100%	115	73	150	15	-					
	System	shut do	wn on 7/26/0	00 at 6:	30. Sys	tem resta	rted on i	7/27/00 a	t 6:00.				
7/27/00	6:00	2,791	86%	75	49	140	14	-					,
8/3/00	8:00	2,961	100%	75	49	140	15	-	1				
8/8/00	14:30	3,086	100%	77	50	140	15	-					
	Systen	n shut do	wn on 8/15/0	00 at 11	:30. Sy	stem rest	arted on	8/21/00	at 10:30				
8/24/00	•	3,326		76	50	140	27	l -	1				
			vn on 8/30/0	00 at 13	:30. Sy	stem rest	arted on	8/31/00	at 9:00.				
8/31/00	-	3,471	88%	64	45	120	36	l -	1				

Erler & Kalinowski, Inc.

TABLE 4a

Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow			Total	TCE	Estimated VOC Removal		Cumulative M Removal		
				(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	1 - 1	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	tem restar	ted on 9	7/00 at	10:30.									
9/7/00	10:30	3,621	88%	66	46	125	9.7	-					
9/14/00	9:00	3,788	100%	66	43	140	13	5.6	0.12	0.29	104	124	4A
System shut down on 9/14/00 at 11:23.								:					
9/28/00	11:24	3,788	0%	-	-	120	42	54	-	-	-	-	
System restarted on 10/1/00 at 6:30.													
10/1/00	6:30	3,791	4%	-	-	-	-	-					
	System	shut dov	vn on 10/1/0	00 at 10:	30. Sy	stem resta	arted on	10/5/00 a	at 7:30.				,
10/5/00	7:30	3,795	4%	73	52	120	296	- [*]					
10/12/00	8:00	3,964	100%	74	52	120	39	-					
10/19/00	8:00	4,132	100%	72	51	120	39	-					
10/26/00	8:00	4,301	100%	75	54	115	18	2.3	0.061	0.15	106	128	4A
	System	shut dov	vn on 10/31.	/00 at 9:	20. Sy	stem resta	arted on	11/2/00 a	at 8:00.				
11/2/00	8:00	4,422	72%	-	-	140	17	-					
	System	shut dov	vn on 11/2/0	00 at 19:	:00. Sys	stem resta	arted on	11/9/00 a	at 7:30.				
11/9/00	7:30	4,433	7%	-	-	140	397	-					
;	System	shut dov	vn on 11/9/0	00 at 15:	30. Sy	stem resta	arted on	11/16/00	at 10:00).			
11/16/00	10:00	4,441	5%	-	-	140	144	-]			
;	System	shut dov	vn on 11/17.	/00 at 1	2:00. S	ystem res	tarted o	n 11/23/0	0 at 7:30).			
11/23/00	7:30	4,443	1%	-	-	140	152	-					
11/30/00	7:30	4,611	100%	-	-	140	121	-					
System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.													
12/7/00	8:00	4,768	93%	-	-	140	107	-					
12/14/00	10:30	4,940	100%	57	38	140	6.2	6.7	0.13	0.23	108	133	4A
System shut down on 12/14/00 at 12:15.													
1/4/01	11:37	4,940	0%	170	111	140	44	30	-	-	-		

TABLE 4a Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)		Flow			Total	TCE	Estimated VOC Removal		Cumulative Mass Removal		
					(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	(lb/day) V	otal OCs /day)	TCE (lbs)	Total VOCs (lbs)	Notes
System restarted on 2/19/01 at 15:45.													
2/19/01	15:45	4,940	0%	-	-	140	42	-					
2/22/01	17:00	5,016	100%	-	-	140	37	-					ĺ
3/1/01	12:45	5,180	100%	-	-	140	29	-					
3/8/01	7:30	5,343	100%	-	-	145	48	-					
3/15/01	13:00	5,516	100%	-	-	145	8.5	-					ļ
3/22/01	13:00	5,682	100%	-	-	145	7.8	-					
3/29/01	14:30	5,854	100%	-	-	140	8.5	-					
4/5/01	10:00	6,016	100%	-	-	`140	19	_	,				`
4/11/01	9:00	6,160	100%	-	-	140	20	-					
4/18/01	12:30	6,331	100%	145	97	135	25	-					
4/25/01	13:15	6,500	100%	155	104	133	25	-					
5/2/01	11:45	6,666	100%	158	106	135	22	-					1
5/9/01	12:30	6,836	100%	162	108	135	19	-					
5/16/01	11:45	7,002	100%	157	103	140	17	-		ł			
5/23/01	11:00	7,169	100%	161	106	140	18	-					
5/31/01	15:36	7,360	100%	60	39	140	4.4	6.8	0.13 0	.19	121	155	4A
System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.													ļ
6/14/01	12:20	7,360	0%	84	61	112	25	46	-	-	_	-	
6/20/01	13:30	7,515	100%	110	75	130	18	-					
System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.													
6/28/01	6:30	7,540	14%	<u> </u>		_		-					

Page 3 of 4

6 July 2001

TABLE 4a

Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	Elapsed Time on Hour Meter (hrs)		Flow			Total	TCE	Estimated VOC Removal	Cumulative Mass Removal		
Date Time		Operation Time		(scfm)	` '	by PID	Conc. by Lab (ppmv)	TCE Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

PID = photoionization detector

NOTES:

TCE = trichloroethene
acfm = actual cubic feet per minute
°F = degrees Fahrenheit
hrs = hours
in-wc = inches of water column
lb/day = pounds per day

lbs = pounds

ppmv = parts per million by volume scfm = standard cubic feet per minute tr = trace (concentration detected at less than reporting limit) VOCs = volatile organic compounds - = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows (see Notes column in table):
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
 - B: Mass removal calculated using the previous mass removal rate.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples of undiluted blower influent. The total VOC mass removal rate presented in this table is the sum of the undiluted mass removal rates calculated for each VOC that was detected.

TABLE 4b

Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for April through June 2001

Static vaper sample color			Elapsed	Fie	ow .		Total	TCE		ed VOC al Rates		ulative I Remova	
3/15/00 9:25 5.6 0.04 0.04 35 865 10,000 0.18 0.19 0 0 System startup or 3/16/00 at 16:00. 3/17/00 7:00 20 0.04 0.04 37 191 - 3/18/00 6:30 45 0.06 0.05 38 195 - System shut down or 3/18/00 at 9:40. 3/19/00 6:30 48 0.70 0.63 38 2,000+ - 3/21/00 7:00 96 0.61 0.52 60 2,000+ - 3/221/00 7:30 121 0.58 0.56 15 2,000+ 0.000 2.8 2.9 7.1 7.3 4A 3/30/00 11:00 316 0.87 0.79 38 1,799 - 4/46/00 11:00 483 0.45 0.31 125 719 - 4/46/00 11:00 483 0.45 0.31 125 719 - 4/420/00 7:30 815 0.70 0.45 145 868 - 4/227/00 7:30 815 0.70 0.45 145 868 - 4/227/00 7:30 815 0.70 0.45 145 868 - 4/227/00 7:00 983 0.87 0.55 150 915 - 5/4/20 0.30 1,318 0.92 0.58 150 2,000+ 0. 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ 0. 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ 0. 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ 0. 5/11/00 6:30 1,654 1.3 0.84 150 276 - 6/10/00 6:30 1,654 1.3 0.84 150 146 - 6/10/00 6:30 1,654 1.3 0.84 150 146 - 6/10/00 6:30 1,654 1.3 0.84 150 146 - 6/10/00 7:00 1,486 1.1 0.69 150 146 - 6/10/00 7:00 1,990 0.67 0.41 155 112 - 6/10/00 7:30 2,158 0.65 0.41 150 128 - System restarted or 7/6/00 at 10:00 System shut down or 6/21/00 at 11:00 System shut down or 7/26/00 at 10:00 Syste	Date	Time	Hour Meter	(acfm)	(scfm)	1	VOCs by PID	Conc. by Lab	TCE	Total VOCs	TCE	Total VOCs	
System startup on 3/16/00 at 16:00. System startup on 3/16/00 16:00. System startup on 3/18/00 6:30 45 0.06 0.05 38 195 -		Static va	por samp	le colle	cted on	3/16/00.							
3/17/00	3/16/00	9:25	5.6	0.04	0.04	35	865	10,000	0.18	0.19	0	0	
3/18/00 6:30 45 0.06 0.05 38 195 -		System	startup or	1 3/16/00	at 16:0	0.							·
3/18/00 6:30 45 0.06 0.05 38 195 -	3/17/00	-					191	-					
3/19/00 6:30 48 0.70 0.63 38 2,000+ - 3/20/00 6:30 72 0.63 0.56 43 2,000+ - 3/20/00 7:00 96 0.61 0.52 60 2,000+ - 3/20/00 7:30 121 0.58 0.56 15 2,000+ 10,000 2.8 2.9 7.1 7.3 4A 3/20/00 7:30 121 0.58 0.56 15 2,000+ 10,000 2.8 2.9 7.1 7.3 4A 3/20/00 11:00 316 0.87 0.79 38 1,799 - 4/6/00 11:00 483 0.45 0.31 125 719 - 4/13/00 8:00 648 0.85 0.54 150 716 6,500 1.7 1.8 57 58 4A 4/20/00 7:30 815 0.70 0.45 145 868 - 4/27/00 7:00 983 0.87 0.55 150 915 - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ 5/5/18/00 7:00 1,486 1.1 0.68 150 276 3,700 1.2 1.3 109 112 4A 1.1 0.69 150 276 - 1.3 1.3 1.3 5/25/00 6:30 1,654 1.3 0.84 150 146 - 1.1 0.69 150 276 - 1.3 1.3 1.3 5/25/00 6:30 1,822 0.65 0.41 150 128 - 6/1/00 6:30 1,822 0.65 0.41 150 105 - 5/26 0.61 128 - 6/1/00 6:30 1,822 0.65 0.41 150 105 - 5/26 0.61 1.990 0.67 0.41 155 112 - 6/1/5/00 7:30 2,158 0.65 0.41 150 105 - 5/26 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.7						L		-					
3/19/00 6:30 48 0.70 0.63 38 2,000+ - 3/20/00 6:30 72 0.63 0.56 43 2,000+ - 3/20/00 7:00 96 0.61 0.52 60 2,000+ - 3/20/00 7:30 121 0.58 0.56 15 2,000+ 10,000 2.8 2.9 7.1 7.3 4A 3/20/00 7:30 121 0.58 0.56 15 2,000+ 10,000 2.8 2.9 7.1 7.3 4A 3/20/00 11:00 316 0.87 0.79 38 1,799 - 4/6/00 11:00 483 0.45 0.31 125 719 - 4/13/00 8:00 648 0.85 0.54 150 716 6,500 1.7 1.8 57 58 4A 4/20/00 7:30 815 0.70 0.45 145 868 - 4/27/00 7:00 983 0.87 0.55 150 915 - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ 5/5/18/00 7:00 1,486 1.1 0.68 150 276 3,700 1.2 1.3 109 112 4A 1.1 0.69 150 276 - 1.3 1.3 1.3 5/25/00 6:30 1,654 1.3 0.84 150 146 - 1.1 0.69 150 276 - 1.3 1.3 1.3 5/25/00 6:30 1,822 0.65 0.41 150 128 - 6/1/00 6:30 1,822 0.65 0.41 150 105 - 5/26 0.61 128 - 6/1/00 6:30 1,822 0.65 0.41 150 105 - 5/26 0.61 1.990 0.67 0.41 155 112 - 6/1/5/00 7:30 2,158 0.65 0.41 150 105 - 5/26 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.7		System	shut dow	n on 3/18	B/00 at 9):40. Syst	em resta	rted on 3	/19/00 at 6:	30.			
3/20/00 6:30 72 0.63 0.56 43 2,000+ - 3/21/00 7:00 96 0.61 0.52 60 2,000+ - 3/22/00 7:30 121 0.58 0.56 15 2,000+ 10,000 2.8 2.9 7.1 7.3 4A 3/30/00 11:00 316 0.87 0.79 38 1,799 - 4/46/00 11:00 483 0.45 0.31 125 719 - 4/13/00 8:00 648 0.85 0.54 150 716 6,500 1.7 1.8 57 58 4A 4/20/00 7:30 815 0.70 0.45 145 868 - 4/27/00 7:00 983 0.87 0.55 150 915 - 5/14/00 8:30 1,152 0.89 0.56 150 2,000+ - 5/14/00 6:30 1,318 0.92 0.58 150 2,000+ - 5/14/00 6:30 1,318 0.92 0.58 150 2,000+ - 5/14/00 6:30 1,318 0.92 0.58 150 2,000+ - 5/14/00 6:30 1,822 0.65 0.41 150 146 - 6/14/00 6:30 1,822 0.65 0.41 150 146 - 6/14/00 6:30 1,822 0.65 0.41 150 128 - 6/14/00 6:30 1,822 0.65 0.41 150 105 - 5/15/00 7:30 2,158 0.65 0.41 150 105 - 5/12 - 5/14/00 6:30 1,822 0.65 0.41 150 105 - 5/15/00 7:30 2,158 0.65 0.41 150 105 - 5/12 - 5/14/00 6:30 1,822 0.65 0.41 150 105 105 - 5/14/00 6:30 1,822 0.65 0.41 150 105 105 - 5/14/00 105 105 - 5/14/00 105 105 105 - 5/14/00 105 105 105 105 1	3/19/00	_									•		
3/21/00						4		-					
3/22/00	1					1		-					
4/6/00 11:00 483 0.45 0.31 125 719 - 4/13/00 8:00 648 0.85 0.54 150 716 6,500 1.7 1.8 57 58 4A 4/20/00 7:30 815 0.70 0.45 145 868 - - - - - 5/4/200 -	1			0.58	0.56	15	2,000+	10,000	2.8	2.9	7.1	7.3	4A
4/13/00 8:00 648 0.85 0.54 150 716 6,500 1.7 1.8 57 58 4A 4/20/00 7:30 815 0.70 0.45 145 868 - 4/27/00 7:00 983 0.87 0.55 150 915 - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ - 5/18/00 7:00 1,486 1.1 0.69 150 276 3,700 1.2 1.3 109 112 4A 5/25/00 6:30 1,654 1.3 0.84 150 146 - 6/1/00 6:30 1,822 0.65 0.41 150 128 - 6/8/00 7:00 1,990 0.67 0.41 155 112 - 6/15/00 7:30 2,158 0.65 0.41 150 105 - System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300 System restarted on 7/6/00 at 10:00. 7/13/00 12:00 2,485 1.3 0.84 145 2,000+ 2,200 0.92 0.95 154 159 4A 7/20/00 7:30 2,648 1.3 0.83 150 154 - System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/3/00 8:00 2,961 2.1 1.4 140 89 -		11:00	316	0.87	0.79	38	1,799	-					
4/20/00 7:30 815 0.70 0.45 145 868 - - 4/27/00 7:00 983 0.87 0.55 150 915 - - 5/4/00 8:30 1,152 0.89 0.56 150 1,427 - - 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ - - 5/11/00 1.2 1.3 109 112 4A 5/18/00 7:00 1,486 1.1 0.68 150 276 - 1.3 1.3 109 112 4A 5/25/00 6:30 1,654 1.3 0.84 150 146 - - 1.3 1.3 - - - 6/8/00 7:00 1,990 0.67 0.41 155 112 - <td>4/6/00</td> <td>11:00</td> <td>483</td> <td>0.45</td> <td>0.31</td> <td>125</td> <td>719</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	4/6/00	11:00	483	0.45	0.31	125	719	-					
4/27/00 7:00 983 0.87 0.55 150 915 - <td>4/13/00</td> <td>8:00</td> <td>648</td> <td>0.85</td> <td>0.54</td> <td>150</td> <td>716</td> <td>6,500</td> <td>1.7</td> <td>1.8</td> <td>57</td> <td>58</td> <td>4A</td>	4/13/00	8:00	648	0.85	0.54	150	716	6,500	1.7	1.8	57	58	4A
5/4/00 8:30 1,152 0.89 0.56 150 1,427 - - 5/11/00 6:30 1,318 0.92 0.58 150 2,000+ - - 5/18/00 7:00 1,486 1.1 0.68 150 276 3,700 1.2 1.3 109 112 4A 5/25/00 6:30 1,654 1.3 0.84 150 146 - <	4/20/00	7:30	815	0.70	0.45	145	868	-					:
5/11/00 6:30 1,318 0.92 0.58 150 2,000+ -	4/27/00	7:00	983	0.87	0.55	150	915	-					
5/18/00 7:00 1,486	5/4/00	8:30	1,152	1			-	-					
1.1 0.69 150 276 - 1.3 1.3 - -	5/11/00						-	-					
5/25/00 6:30 1,654 1.3 0.84 150 146 - 6/1/00 6:30 1,822 0.65 0.41 150 128 - 6/8/00 7:00 1,990 0.67 0.41 155 112 - 6/15/00 7:30 2,158 0.65 0.41 150 105 - System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300 -	5/18/00	7:00	1,486			1		3,700			109	112	4A
6/1/00 6:30 1,822 0.65 0.41 150 128 - 6/8/00 7:00 1,990 0.67 0.41 155 112 - 6/15/00 7:30 2,158 0.65 0.41 150 105 - System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300 -								-	1.3	1.3	-	-	
6/8/00 7:00 1,990 0.67 0.41 155 112 - 6/15/00 7:30 2,158 0.65 0.41 150 105 - System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300			-			1		-					
6/15/00 7:30 2,158 0.65 0.41 150 105 - System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300 -						1	i	-					
System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. 7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300								-					
7/6/00 9:49 2,312 1.3 0.89 130 1,582 3,300 - - - - - System restarted on 7/6/00 at 10:00. 7/13/00 12:00 2,485 1.3 0.84 145 2,000+ 2,200 0.92 0.95 154 159 4A 7/20/00 7:30 2,648 1.3 0.83 150 154 - System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00. 7/27/00 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -	6/15/00			ı				-					
System restarted on 7/6/00 at 10:00. 7/13/00 12:00 2,485 1.3 0.84 145 2,000+ 2,200 0.92 0.95 154 159 4A 7/20/00 7:30 2,648 1.3 0.83 150 154 - System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00. 7/27/00 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -		System	shut dow			_			collected o	n 7/6/00.			
7/13/00 12:00 2,485 1.3 0.84 145 2,000+ 2,200 0.92 0.95 154 159 4A 7/20/00 7:30 2,648 1.3 0.83 150 154 -	7/6/00	9:49	2,312	1.3	0.89	130	1,582	3,300	-	-	-	-	
7/20/00 7:30 2,648 1.3 0.83 150 154 - System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00. 7/27/00 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -		System	restarted	on 7/6/0	0 at 10:0	00.							
7/20/00 7:30 2,648 1.3 0.83 150 154 - System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00. 7/27/00 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -	7/13/00	12:00	2,485	1.3	0.84	145	2,000+	2,200	0.92	0.95	154	159	4A
7/27/00 6:00 2,791 2.0 1.3 140 77 - 8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -	7/20/00	7:30	2,648	1.3	0.83	150	154	-					
8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -		System	shut dow	n on 7/2	6/00 at 6	30. Syst	tem resta	rted on 7	/27/00 at 6:	00.			
8/3/00 8:00 2,961 2.1 1.4 140 89 - 8/8/00 14:30 3,086 2.1 1.4 140 92 -	7/27/00	6:00	2,791	2.0	1.3	140	77	-					
	1	8:00	2,961	2.1	1.4	140	89	-					
System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.	1	14:30	3,086	2.1	1.4	140	92	-					
		System	shut dow	n on 8/1	5/00 at 1	1:30. Sy	stem rest	arted on	B/21/00 at 1	10:30.			

TABLE 4b

Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for April through June 2001

		Eleneed	Flo	ow .					ed VOC		ulative	
		Elapsed Time on	- •			Total	TCE	Remov	al Rates		Remova	<u> </u>
Date	Time	Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,326	2.3	1.5	140	622	-					
	System :	shut dow	n on 8/3(0/00 at 1	3:30. Sy	stem rest	arted on	8/31/00 at !	9:00.			
8/31/00	9:00	3,471	0.96	0.68	120	1,820	-					
:	System :	shut dow	n on 9/6/	00 at 15	:00. Syst	tem resta	rted on 9/	7/00.				
9/7/00	10:30	3,621	1.1	0.78	125	62	-					
9/14/00	9:00	3,788	1.6	1.0	140	76	300	0.15	0.16	183	189	4A
] ,	System :	shut dow	n on 9/1	4/00 _, at 1	1:23.						•	
9/28/00	11:07	3,788	1.6	1.1	120	2,000+	230	-	-	-	-	
	System	restarted	on 10/1/	00 at 6:3	30.		;					
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sys	stem rest	arted on	10/5/00 at 7	7:30.			
10/5/00	7:30	3,795	2.3	1.6	120	2,000+	-					
10/12/00	8:00	3,964	2.4	1.7	120	1,687	-					
10/19/00	8:00	4,132	2.4	1.7	120	651	- '					
10/26/00	8:00	4,301	2.4	1.7	115	385	140	0.12	0.12	186	192	4A
	System :	shut dow	n on 10/	31/00 at	9:20. Sys	stem rest	arted on	11/2/00 at 8	B:00.			
11/2/00	8:00	4,422	3.6	2.4	140	289	-					
	System :	shut dow	n on 11/	2/00 at 1	9:00. Sy	stem rest	arted on	11/9/00 at 1	7:30.			
11/9/00	7:30	4,433	2.5	1.6	140	2,000+	-					
	System	shut dow	n on 11/	9/00 at 1	5:30. Sy	stem rest	arted on	11/16/00 at	10:00.			
11/16/00	10:00	4,441	2.7	1.7	140	2,000+	-					
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	tarted on	11/23/00 a	at 7:30.			
11/23/00	7:30	4,443	2.5	1.7	140	2,000+	-					
11/30/00	7:30	4,611	12.4	8.1	140	748	-					
}	System	shut dow	n on 12/	6/00 at 2	21:00. Sys	stem rest	arted on	12/7/00 at 8	3:00.			
12/7/00	8:00	4,768	8.3	5.4	140	111	-					
12/14/00	10:30	4,940	2.4	1.6	140	43	260	0.21	0.22	191	197	4A
•	System	shut dow	n on 12/	14/00 at	12:15.							
1/4/01	11:02	4,940	2.3	1.6	120	515	350	-	-	-		

TABLE 4b Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for April through June 2001

		Elapsed		ow		Total	TCE		ed VOC al Rates		ulative l Remova	1
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	restarted	on 2/19/	01 at 15	45.				·			
2/19/01	15:45	4,940	2.5	1.6	140	875	-					
2/22/01	17:00	5,016	2.6	1.7	140	801	-					
3/1/01	12:45	5,180	2.5	1.7	140	1,505	-					
3/8/01	7:30	5,343	2.5	1.6	145	79	-					
3/15/01	13:00	5,516	2.5	1.6	145	37	-					
3/22/01	13:00	5,682	2.6	1.6	145	53	-					İ
3/29/01	14:30	5,854	2.3	1.6	· 130	38	-	,			,	
4/5/01	10:00	6,016	-	-	140	19	-					
4/11/01	9:00	6,160	2.3	1.5	140	19	-					
4/18/01	12:30	6,331	2.3	1.5	135	17	-					
4/25/01	13:15	6,500	2.4	1.6	133	16	-					
5/2/01	11:45	6,666	2.4	1.6	135	18	-					
5/9/01	12:30	6,836	2.6	1.7	135	16	-					
5/16/01	11:45	7,002	2.6	1.7	140	18	-					
5/23/01	11:00	7,169	2.7	1.7	140	19	-					
5/31/01	15:58	7,360	2.6	1.7	140	5.6	7.8	0.0066	0.011	201	208	4A
	System	shut dow	n on 5/3	1/01 at 1	6:35. Sys	stem rest	arted on (6/14/01 at 8	3:00.			
6/14/01	11:06	7,360	29	21	112	7.1	11	-	-	-	-	
6/20/01	12:30	7,515	17	11	130	0.0	-					
	System	shut dow	n on 6/2	1/01 at 1	4:30. Sys	stem rest	arted on (6/28/01 at (6:30 .			
6/28/01	6:30	7,540	25	20	82	9.2	<u> </u>					

TABLE 4b

Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

:		Elapsed		ow		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	l	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well SVE-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

6 July 2001

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for April through June 2001

		Elapsed Time on	Fk	ow		Total	TCE	i	ed VOC al Rates	1	ulative l Remova	
Date	Time	Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	10:10	5.6	0.61	0.56	35	227	75	0.021	0.021	0	0	
	System 9	Startup or	3/16/00	at 16:0	0.							
3/17/00	7:00	20.3	0.61	0.55	37	191	_					
3/18/00	6:30	44.7	0.61	0.55	38	33	-					
	System :	shut dowr	n on 3/18	8/00 at 9	:40. Syst	em resta	rted on 3	/19/00 at 6:	30.			
3/19/00	6:30	47,9	0.65	0.59	38	. 298	_		,			
3/20/00	6:30	72.2	0.94	0.84	43	235	-		,			`
3/21/00	7:00	96.3	0.89	0.76	60	227	-					
3/22/00	7:30	120.5	0.57	0.55	15	93	-					i
3/30/00	11:00	316	0.59	0.53	38	78	-					
4/6/00	11:00	483	0.74	0.51	125	38	-					
4/13/00	8:00	648	2.5	1.6	150	26	-			i		
4/20/00	7:30	815	1.1	0.71	145	5.4	-					
4/27/00	7:00	983	2.4	1.5	150	2.7	-					
5/4/00	8:30	1,152	2.3	1.5	150	5.8	-					
5/11/00	6:30	1,318	2.2	1.4	150	5.2	-					
5/18/00	7:00	1,486	2.2	1.4	150	13	-					
			2.0	1.3	150	13	-					
5/25/00	6:30	1,654	2.1	1.3	150	6.8	~					
6/1/00	6:30	1,822	2.1	1.3	150	28	-]					
6/8/00	7:00	1,990	2.1	1.3	155	42	-					
6/15/00	7:30	2,158	2.1	1.3	150	38	-					
	System :	shut dowr	on 6/2	1/00 at 1	7:30. Sta	tic vapor	sample o	collected o	n 7/6/00.			
7/6/00	9:25	2,312	1.2	0.83	130	37	120	0.050	0.054	3.4	3.6	4A
	System	restarted (on 7/6/0	0 at 10:0	0.							
7/13/00	12:00	2,485	1.3	0.80	145	6.8	_					
7/20/00	7:30	2,648	1.3	0.80	150	27	_					
			,		'		rted on 7	/ /27/00 at 6:	00.			
7/27/00	6:00	2,791	1.6	1.1	140	18						
8/3/00	7:30	2,961	1.6	1.0	140	17	_					
8/8/00	14:30	3,086	1.6	1.0	140	14	_					
0,0,00							arted on 9	 	10.30			
	•						aiteu on (B/21/00 at 1	.v.3v.			
8/24/00	12:30	3,326	1.9	1.2	140	1.7	-					

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for April through June 2001

		Elapsed	Fle	ow		Total	TCE		ted VOC al Rates	f	ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	shut dowr	n on 8/3	0/00 at 1	3:30. Sys	stem rest	arted on	8/31/00 at	9:00.			
8/31/00	9:00	3,471	1.5	1.1	120	22	_					
	System	shut dow	n on 9/6/	00 at 15	:00. Syst	em resta	rted on 9	/7/00.				
9/7/00	10:30	3,621	1.6	1.1	125	16	-					
9/14/00	9:00	3,788	1.6	1.1	140	20	77	0.041	0.042	6.2	6.5	4A
	System :	shut dow	n at 11:2	23.						<u> </u>		
9/28/00	10:50	3,788	. 1.4	1.0	120	61,	110	-	- ,	-	-	
	System	restarted	on 10/1/	00 at 6:3	30.					<u> </u>		
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sys	stem rest	arted on	10/5/00 at	7:30.			
10/5/00	7:30	3,795	1.9	1.4	120	9.7	-					
10/12/00	8:00	3,964	1.9	1.4	120	97	-					
10/19/00	8:00	4,132	1.9	1.3	120	33	-					
10/26/00	8:00	4,301	2.1	1.5	115	28	-					
	System	shut dow	n on 10/	31/00 at	9:20. Sys	stem rest	arted on	11/2/00 at	8:00.			
11/2/00	8:00	4,422	-	-	140	6.0	-					
	System	shut dow	n on 11 <i>l</i> :	2/00 at 1	9:00. Sys	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	-	_	140	8.2	-					
	System	shut dow	n on 11/	9/00 at 1	5:30. Sys	stem rest	arted on	11/16/00 at	10:00.			
11/16/00	10:00	4,441	-	-	140	810	-					
1	System	shut dow	n on 11/	17/00 at	12:00. Sy	ystem res	started or	11/23/00	at 7:30.			
11/23/00	7:30	4,443	-	_	140	7.5	-					
11/30/00	7:30	4,611	-	-	140	5.3	-					
	System	shut dow	n on 12/	6/00 at 2	1:00. Sy	stem rest	arted on	12/7/00 at	B:00.			
12/7/00	8:00	4,768	-	-	140	40	-					
12/14/00	10:30	4,940	2.9	1.9	140	9.7	29	0.027	0.029	7.8	8.2	4A
	System	shut dow	n on 12/	14/00 at	12:15.							
1/4/01	10:20	4,940	1.9	1.3	120	25	34	-	-	-	-	

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for April through June 2001

		Elapsed	Fle	ow .		Total	TCE		ed VOC al Rates	l	ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)		Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	restarted	on 2/19/	01 at 15	45.							
2/19/01	15:45	4,940	-	-	140	38	-					
2/22/01	17:00	5,016	-	-	140	46	-					
3/1/01	12:45	5,180	-	-	140	61	-					
3/8/01	7:30	5,343	-	-	145	33	-	-				
3/15/01	13:00	5,516	-	-	145	5.8	-					
3/22/01	13:00	5,682	-	-	145	3.7	-					
3/29/01	14:30	5,854	- ,	-	140	7.5	· -			,		
4/5/01	10:00	6,016	-	-	140	16	-					
4/11/01	9:00	6,160	2.3	1.5	140	11	-					
4/18/01	12:30	6,331	2.3	1.6	135	6.3	-					
4/25/01	13:15	6,500	2.4	1.6	133	5.1	-					
5/2/01	11:45	6,666	2.4	1.6	135	4.8	-					
5/9/01	12:30	6,836	3.1	2.1	135	3.5	-					
5/16/01	11:45	7,002	3.4	2.2	140	1.3	-					
5/23/01	11:00	7,169	3.5	2.3	140	2.0	-					
5/31/01	15:50	7,360	2.3	1.5	140	6.1	10	0.0075	0.0090	9.6	10	4A
	System	shut dow	n on 5/3	1/01 at 1	6:35. Sys	stem rest	arted on	6/14/01 at	B:00.			
6/14/01	10:54	7,360	43	31	115	8.4	22	-	-	-	-	
6/20/01	12:30	7,515	16	11	130	1.1	-					
	System	shut dow	n on 6/2	1/01 at 1	4:30. Sys	stem rest	arted on	6/28/01 at (6:30.			
6/28/01	6:30	7,540	30	25	78	24	-					

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed		ow		Total	TCE		ted VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

ibs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well SVE-2 is screened in the shallow vadose zone from 18 to 24 feet below ground surface.

TABLE 4d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed Time on	FI	ow		Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.	·						
3/16/00	9:57	5.6	0.41	0.37	35	31	25	0.0047	0.0054	0	0	
	System :	Startup or	3/16/00	at 16:0	0 .							
3/17/00	7:00	20.3	0.98	0.89	37	6.1	-					
3/18/00	6:30	44.7	0.98	0.89	38	8.3	-					
	System	shut dowr	n on 3/1	8/00 at 9	:40. Syst	em restai	rted on 3/	19/00 at 6:	30.			
3/19/00	6:30	47.9	0.98	0.89	38	45	_	Ι,				
3/20/00	6:30	72.2	0.98	0.88	43	7.4	-				·	
3/21/00	7:00	96.3	1.0	0.85	60	11	-					
3/22/00	7:30	120.5	0.95	0.91	15	10	-					
3/30/00	11:00	316.0	0.76	0.69	38	29	-					
4/6/00	11:00	483.0	1.6	1.1	125	25	-					
4/13/00	8:00	648.0	2.1	1.3	150	22	-					
4/20/00	7:30	815.0	1.7	1.1	145	6.8	-					
4/27/00	7:00	983.0	1.2	0.78	150	4.3	-					
5/4/00	8:30	1,152.0	1.6	0.98	150	2.8	-					
5/11/00	6:30	1,318.0	1.6	1.0	150	2.2	-		,			*
5/18/00	7:00	1,486.0	1.6	0.98	150	9.0	-					
E/05/00	0.00	4.054.0	1.6	0.98	150	9.0	-					
5/25/00	6:30	1,654.0	1.6	0.99	150	4.2	-					
6/1/00	6:30	1,822.0	1.5 1.4	0.95 0.88	150 155	7.5 5.2	-					
6/8/00 6/15/00	7:00 7:30	1,990.0 2,158.0		0.90	150	4.9	-					
0/15/00			l				-	 	- 7/C/00			
7/0/00	•							collected or		0.50	0.74	4.0
7/6/00	8:46	2,312	l	1.5	130	7.3	7.4	0.0057	0.0095	0.50	0.71	4A
	=	restarted			. 1	0.5						
7/13/00	12:00	2,485	2.3	1.5	145	3.5	-					
7/20/00	7:30	2,648	2.2	1.4	150	4.1	·	(A=(0.0				
	-						τed on 7/	27/00 at 6:	υυ.			
7/27/00	6:00	2,791	1.9	1.3	140	5.1	-					
8/3/00	8:00	2,961	1.9	1.2	140	2.2	-					
8/8/00	14:30	2,961	1.9	1.3	140	2.3	-					
	System						arted on 8	3/21/00 at 1	0:30.			
8/24/00	12:30	3,326	2.0	1.3	140	1.9	-					

Erler & Kalinowski, Inc.

TABLE 4d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for April through June 2001

		Elapsed	Fi	ow		Total	TCE	E .	ted VOC al Rates	!	ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	shut dow	n on 8/3	0/00 at 1	3:30. Sys	tem rest	arted on 8	8/31/00 at 9	9:00.			
8/31/00	9:00	3,471	1.4	1.0	120	2.6	_	1				
	System	shut dow	n on 9/6/	00 at 15	:00. Syst	em resta	ted on 9/	7/00.				
9/7/00	10:30	3,621	1.4	1.0	125	1.2	-	1				
9/14/00	9:00	3,788	1.5	1.0	140	1.5	2.5	0.0012	0.0028	0.71	1.1	4A
1	System	shut dow	n on 9/1	4/00 at 1	1:23							
9/28/00	9:52	3,788	-	-	120	8.0	3.8	- 、	-	-	-	,
	System	restarted	on 10/1/	00 at 6:3	0 .							
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dowi	n on 10/	1/00 at 1	0:30. Sys	tem rest	arted on '	10/5/00 at 7	7:30.			
10/5/00	7:30	3,795	1.8	1.3	120	4.6	-					
10/12/00	8:00	3,964	1.9	1.3	120	5.6	-					
10/19/00		4,132	1.9	1.3	120	4.1	-					
10/26/00		4,301	1.9	1.3	115	4.1	_					
	•		_				arted on '	11/2/00 at 8	3:00.			
11/2/00	8:00	4,422	7.1	4.7	140	0.5	-					
	System	shut dow	n on 11/2	2/00 at 1	9:00. Sys	tem rest	arted on 1	11/9/00 at 7	7:30.			
11/9/00	7:30	4,433	1.9	1.3	140	25.2	-					
	System	shut dow	n on 11/9	9/00 at 1	5:30. Sys	tem resta	arted on '	11/16/00 at	10:00.			
11/16/00	10:00	4,441	-	-	140	8.9	- :					
	System	shut dow	n on 11/	17/00 at	12:00. Sy	stem res	tarted on	11/23/00 a	t 7:30.			
11/23/00	7:30	4,443		-	140	11.9	-					
11/30/00	7:30	4,611	5.6	3.6	140	6.2	-					
	System	shut dow	n on 12/	6/00 at 2	1:00. Sys	tem resta	arted on '	12/7/00 at 8	3:00.			
12/7/00	8:00	4,768	-	-	140	14.4	-					
12/14/00	10:30	4,940	2.3	1.5	140	1.2	1.2	0.00089	0.0023	0.76	1.2	4A
	System	shut dow	n on 12/	14/00 at	12:15.							
1/4/01	9:45	4,940	2.1	1.5	120	1.5	1.3	-	-	-		

TABLE 4d Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for April through June 2001

	0.50	Elapsed	Fl	ow		Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	restarted	on 2/19/	01 at 15:	45.							
2/19/01	15:45	4,940	3.8	2.5	140	6.0	-					
2/22/01	17:00	5,016	3.4	2.2	140	6.4	-					
3/1/01	12:45	5,180	2.6	1.7	140	6.3	-					
3/8/01	7:30	5,343	2.6	1.7	145	0.0	-					
3/15/01	13:00	5,516	2.6	1.7	145	0.5	-					
3/22/01	13:00	5,682	2.6	1.7	145	3.3	-					
3/29/01	14:30	5,854	2.7	1.7	140	8.3	-		•			,
4/5/01	10:00	6,016	2.7	1.8	140	10	-					
4/11/01	9:00	6,160	2.6	1.7	140	1.9	-					
4/18/01	12:30	6,331	2.5	1.7	135	1.8	-					
4/25/01	13:15	6,500	2.7	1.8	133	3.3	-					
5/2/01	11:45	6,666	2.7	1.8	135	3.1	-					
5/9/01	12:30	6,836	3.5	2.3	135	3.5	-					
5/16/01	11:45	7,002	3.6	2.3	140	1.5	-					
5/23/01	11:00	7,169	3.5	2.3	140	2.5	-					
5/31/01	16:05	7,360	10	6.6	140	5.6	5.0	0.016	0.027	1.6	2.7	4A
	System	shut dow	n on 5/3	1/01 at 1	6:35. Sys	item rest	arted on (6/14/01 at 8	3:00.			
6/14/01	10:02	7,360	5.7	4.1	115	2.0	1.6	-	-	-	-	
6/20/01	12:30	7,515	11	7.7	130	0.9	-					
	System	shut dow	n on 6/2	1/01 at 1	4:30. Sys	tem rest	arted on (6/28/01 at 6	S:30.			
6/28/01	6:30	7,540	32_	26	81	4.3	<u> </u>	<u> </u>				

TABLE 4d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Fle	ow		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene acfm = actual cubic feet per minute °F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-3. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well SVE-3 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

TABLE 4e

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-1

Quarterly Progress Report for April through June 2001

		Elapsed	Flo	ow .		Total	TCE		ed VOC al Rates		ulative Remova	i
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	11:35	5.6	0	0	0	65	29	-	-	-	-	
	System :	startup or	3/16/00	at 16:0	0 with VM	P-1 used	as a moi	nitoring we	ell.			
4/6/00	11:00	483	0	0	0	6.4	-					
4/13/00	8:00	648	0	0	0	8.2	-					
•	Static va	por samp	le colle	cted on	7/6/00.		,			,		
7/6/00	8:06	2,312	0	0] o	0.0	0.13	-	-	-	-	
	Vapor sa	mple coll	ected o	n 9/14/0	o.							
9/14/00	11:08	3,788	l o	0	l o	0.5	0.29	-	-	_	-	
	Static va	por samp	i le colle	cted on	9/28/00.							
9/28/00	8:51	3,788	0	0	1 0	1.3	0.47	-	_	_	_	
10/26/00	8:00	4,301	Ō	Ö	0	13	-					
	Static va	por samp	le colle	cted on	1/4/01.							
1/4/01	9:15	4,940	l o	0	l o	0.9	0.93	-	-	-	-	
		onverted	to extra	ction we	eli on 3/8/0	01.						
3/8/01	7:30	5,343	l <u>.</u>	_	145	6.4	<u>.</u>					
3/15/01	13:00	5,516	_	_	145	1.9	-					
3/22/01	13:00	5,682	-	-	145	4.1	_					
3/29/01	14:30	5,854	-	-	140	3.8	-					
4/5/01	10:00	6,016	-	-	140	26	-					
4/11/01	9:00	6,160	-	-	140	3.2	-					
4/18/01	12:30	6,331	-	-	135	1.5	-					
4/25/01	13:15	6,500	-		133	2.9	-					
5/2/01	11:45	6,666	-	-	135	2.3	-					
5/9/01	12:30	6,836	-	-	135	3.0	-					
5/16/01	11:45	7,002	14	8.9	140	2.3	-					
5/23/01	11:00	7,169	11	7.2	140	2.1	-					4.5
5/31/01	14:43	7,360	4.5	3.0	140	8.5	9.7	0.014	0.022	1.2	1.9	4A
-	System	shut dow	n on 5/3	1/01 at 1	6:35. Sys		arted on	6/14/01 at 8	B:00.			Ì
6/14/01	9:33	7,360	4.4	3.1	113	0.1	0.27	-	-	-	-	
6/20/01	12:30	7,515	14	9.6	130	1.0	-					

TABLE 4e

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	,	Elapsed	Fle	ow .		Total	TCE		ed VOC al Rates		ulative Remova	
Date		Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	shut dow	on 6/2	1/01 at 1	4:30. Sy	stem rest	arted on	6/28/01 at (6:30.		***	
6/28/01	6:30	7,540	30	24	79	8.8	-					

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using the current mass removal rate.
- 5. Well VMP-1 was first used as an extraction well on 8 March 2001.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well VMP-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

TABLE 4f Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Flo	ow		Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	8:57	5.6	3.7	3.6	6.0	1,580	1,000	1.8	1.9	0	0	
	System	startup or	1 3/16/00	at 16:0	0.							
3/17/00	7:00	20.3	4.6	4.5	l 10	92	_					
3/18/00	6:30	44.7	5.3	5.2	10	131	-					
	System :	shut dow	n on 3/1	8/00 at 9	:40. Syst	em resta	rted on 3	/19/00 at 6	:30.			
3/19/00	6:30	48	0.0	0.0	0.0	30	0	 '			•	
3/20/00	6:30	72	5.8	5.7	9.0	164	0					
3/21/00	7:00	96	2.6	2.6	7.0	560	0					
3/22/00	7:30	121	8.9	8.6	15	70	440	1.9	2.0	8.8	9.1	4A
3/30/00	11:00	316	24	22	38	36	0					
4/6/00	11:00	483	25	17	125	30	0					
4/13/00	8:00	648	33	21	150	33	25	0.26	0.28	32	34	4A
4/20/00	7:30	815	28	18	145	28	0					
4/27/00	7:00	983	18	16	40	25	0					
5/4/00	8:30	1,152	16	10	135	20	0					
5/11/00	6:30	1,318	13	9.7	95	13	0					
5/18/00	7:00	1,486	20	14	120	37	8.6	0.061	0.070	38	40	4A
			26	17	150	37	-	0.071	0.081	-	-	
5/25/00	6:30	1,654	18	11	150	16	-					
6/1/00	6:30	1,822	16	10	150	31	-					
6/8/00	7:00	1,990	21	13	155	31	-					
6/15/00	7:30	2,158	21	13	150	31	l		= /0/00			
	•							collected o	n 7/6/00.			
7/6/00	9:34	2,312	0	0	0	30	92	-	-	-	-	i
	System	restarted	on 7/6/0	0 at 10:0	00.							:
7/13/00	12:00	2,485	34	22	145	37	5.1	0.056	0.25	40	47	4A
7/20/00	7:30	2,648	32	20	150	27	-					:
	System	shut dow	n on 7/2	6/00 at 6	6:30. Syst	tem resta	rted on 7	/27/00 at 6	:00.			
7/27/00	6:00	2,791	26	17	140	9.4	-					
8/3/00	8:00	2,961	26	17	140	1.5	-					
8/8/00	14:30	3,086	26	17	140	1.8	-					İ
	System	shut dow	n on 8/1	5/00 at 1	1:30. Sys	stem rest	arted on	8/21/00 at	10:30.			

Erler & Kalinowski, Inc.

TABLE 4f

Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

			Flow					ed VOC		ulative l	- 1	
		Elapsed	F 19			Total	TCE	Remov	al Rates		Remova	1
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,226	27	18	140	17						
	System	shut dow	n on 8/30	0/00 at 1	3:30. Sys	stem rest	arted on	B/31/00 at 9	9:00.			
8/31/00	9:00	3,471	21	15	120	8.9	-					
	System	shut dow	n on 9/6/	/00 at 15	: :00. Syst	tem resta	rted on 9	/7/00.				
9/7/00	10:30	3,621	22	15	125	5.8	-	1				
9/14/00	9:00	3,788	20	13	140	24	4.0	0.026	0.23	43	60	4A
	System	shut dow	n on 9/1	4/00 at 1	1:23.			,			,	
9/28/00	10:25	3,788	52	36	120	62	120	-	-	-	-	ï
	System	restarted	on 10/1/	00 at 6:	30.							
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sy	stem rest	arted on	10/5/00 at	7:30.			
10/5/00	7:30	3,795	29	21	120	41	-					
10/12/00	8:00	3,964	28	20	120	72	-					
10/19/00	8:00	4,132	19	14	120	6.2	-					
10/26/00		4,301	20	14	115	5.8	2.4	0.017	0.081	43	63	4A
	System	shut dow	n on 10/	31/00 at			arted on	11/2/00 at	8:00.			
11/2/00	8:00	4,422		15	140	1.5	-					
	System	shut dow	n on 11/	2/00 at 1	19:00. Sy	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433		15	140	4.9	-					
	System	shut dow	n on 11/	9/00 at 1	15:30. Sy	stem rest	arted on	11/16/00 at	t 10:00.		•	
11/16/00	10:00	4,441	24	15	140	38	-					
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	started or	11/23/00	at 7:30.			
11/23/00	7:30	4,443	24	16	140	29	-					
11/30/00		4,611	-	-	140	23	-					
	System	shut dow	n on 12/	6/00 at 2	21:00. Sy	_	arted on	12/7/00 at	8:00.			
12/7/00	8:00	4,768	-	-	140	12	-					
12/14/00		4,940	16	11	140	3.1	2.7	0.014	0.025	44	64	4A
	System	shut dow	n on 12/	/14/00 at	_					1		
1/4/01	10:48	4,940	74	52	120	43	41		-		-	

6 July 2001

TABLE 4f Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	FI	ow	·	Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	
	System	restarted	on 2/19/	01 at 15	45.	,						
2/19/01	15:45	4,940	23	15	140	43	-					
2/22/01	17:00	5,016	24	15	140	37	-					
3/1/01	12:45	5,180	24	15	140	81	-					
3/8/01	7:30	5,343	23	15	145	103	-					
3/15/01	13:00	5,516	22	14	145	9.4	-	,				
3/22/01	13:00	5,682	21	14	145	12	-					
3/29/01	14:30	5,854	` 21	14	130	10 `	-		7			
4/5/01	10:00	6,016	22	14	140	31	-					
4/11/01	9:00	6,160	24	16	140	23	-					
4/18/01	12:30	6,331	25	17	135	23	-					
4/25/01	13:15	6,500	25	17	133	18	-					
5/2/01	11:45	6,666	25	16	135	17	-					
5/9/01	12:30	6,836	23	15	135	6.2	-					
5/16/01	11:45	7,002	25	16	140	6.0	-					
5/23/01	11:00	7,169	26	17	140	5.8	-					
5/31/01	15:20	7,360	17	11	140	4.5	6.4	0.035	0.041	46	68	4A
	System :	shut dow	n on 5/3	1/01 at 1	6:35. Sys	stem rest	arted on (6/14/01 at 8	3:00.			
6/14/01	10:33	7,360	52	38	112	106	140	-	-	-	-	
6/20/01	12:30	7,515	13	8.8	130	8.9	-					
	System	shut dow	on 6/2	1/01 at 1	4:30. Sys	stem rest	arted on (6/28/01 at (S:30.			
6/28/01	6:30	7,540	66	54	78	24	-					

6 July 2001

TABLE 4f

Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed		ow		Total	TCE	Estimat Remova	ed VOC al Rates		ulative l Remova	1
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)		Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well SVE-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

TABLE 4g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for April through June 2001

	,	Elapsed	Fle	ow .		Total	TCE	i	ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.	-			<u>, </u>			
3/16/00	10:32	5.6	0	0	0	282	460					
	System	startup or	3/16/00	at 16:0	0 with VM	IP-D1 use	ed as a m	onitoring v	vell.			
4/6/00	11:00	483	0	0	0	3.5	-	1		: :		
4/13/00	8:00	648	0	0	0	23	-					
,	System	shut dow	on 6/2	1/00 at 1	7:30. Sta	tic vapor	sample o	collected c	n 7/6/00.		·	
7/6/00	8:57	2,312	35	24	130	30	9.4	0.11	0.12	0	0	
	System	restarted	on 7/6/0	0 at 10:0	00 with VM	MP-D1 op	erating a	s an extrac	ction well.			
7/13/00	12:00	2,485	33	21	145	3.6	0					
7/20/00	7:30	2,648	34	22	150	3.2	-					
7/27/00	6:00	2,791	26	17	140	9.4	-					
8/3/00	8:00	2,961	25	16	140	1.5	-					
8/8/00	14:30	3,086	24	16	140	1.6	-					
	System	shut dow	n on 8/1	5/00 at 1	1:30. Sys	stem rest	arted on	8/21/00 at	10:30.			
8/24/00	12:30	3,326	22	15	140	2.1	-					
	System	shut dow	on 8/3	0/00 at 1	3:30. Sys	stem rest	arted on	8/31/00 at 9	9:00.			
8/31/00	9:00	3,471	19	14	120	0.9	-					
	System	shut dow	n on 9/6	/00 at 15	: i:00. Syst	em resta	rted on 9	/7/00.				
9/7/00	10:30	3,621	20	14	125	0.2	-	1				
9/14/00	9:00	3,788	20	-	140	1.2	1.4	0.0090	0.012	3.7	4.2	4A
	System	shut dow	on 9/1	4/00 at 1	1:23.							
9/28/00	10:08	3,788	59	41	120	6.3	8.6	_	-	-	-	
	System	restarted	on 10/1/	00 at 6:	30.							
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sys	stem rest	arted on	10/5/00 at 7	7:30.			
10/5/00	7:30	3,795	25	18	120	8.4	-	1				
10/12/00	8:00	3,964	24	17	120	6.7	-					
10/19/00	8:00	4,132	25	17	120	9.4	-					
10/26/00		4,301	22	16	115	24	-					
	System	shut dow	n on 10/	31/00 at	9:20. Sys	stem rest	arted on	11/2/00 at	B:00.			

TABLE 4g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for April through June 2001

	,	Elapsed	Fle	ow		Total	TCE	ì	ted VOC al Rates	1	ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	26	17	140	0	-					
	System	shut dow	on 11/2	2/00 at 1	9:00. Sys	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	-	-	140	59	-					
	System	shut dow	1 on 11/9	9/00 at 1	5:30. Sys	stem rest	arted on	11/16/00 at	10:00.			
11/16/00	10:00	4,441	64	42	140	8.6	-					
	System :	shut dow	' 1 on 11/	17/00 at	12:00. Sy	/stem res	started or	i 11/23/00 a	at 7:30.		•	
11/23/00	7:30	4,443	l 60	40	140	87.4	-	1				
11/30/00	7:30	4,611	39	26	140	27.9	-					
i i	System	shut dow	n on 12/0	6/00 at 2	1:00. Sys	stem rest	arted on	12/7/00 at 8	B:00.			
12/7/00	8:00	4,768	42	27	140	29.3		1				
12/14/00	10:30	4,940	15	10	140	0.3	0.95	0.0047	0.0065	4.0	4.6	4A
		shut dow	n on 12/	14/00 at	12:15.							
1/4/01	9:57	4,940	76	53	120	0.6	1.6	_	-	_	_	
		restarted	•		•	3,13						
2/19/01	15:45	4,940	22	15	140	1.2	_					
2/22/01	17:00	5,016	23	15	140	0.0	_					
3/1/01	12:45	5,180	18	12	140	0.0	-					
3/8/01	7:30	5,343	19	12	145	0.0						
3/15/01	13:00	5,516	18	12	145	0.8	-					
3/22/01	13:00	5,682	19	12	145	0.2	-					
3/29/01	14:30	5,854	19	13	140	0.6	-					
4/5/01	10:00	6,016	28	19	140	0.9	-					
4/11/01	9:00	6,160	19	12	140	0.4	-					
4/18/01	12:30	6,331	25	17 45	135	0.5	-					
4/25/01	13:15	6,500	22 28	15 19	133 135	2.0 2.5	<u>-</u>					
5/2/01 5/9/01	11:45 12:30	6,666 6,836	28 29	20	135	0.0						
5/16/01	11:45	7,002	24	16	140	0.0	-					
5/23/01	11:00	7,169	25	16	140	0.0	_					
5/31/01	14:54	7,360	11	7.5	140	0.8	1.1	0.0041	0.0066	4.4	5.3	4A
l	System	shut dow	n on 5/3	1/01 at 1	6:35. Sys	stem rest	arted on	6/14/01 at 8	B:00.			

TABLE 4g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

-	** .	Elapsed	Flo	ow		Total	TCE	1	ed VOC al Rates		ulative Remova	
Date Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes	
6/14/01	9:50	7,360	47	33	115	2.7	5.7	_		-	-	
6/20/01	12:30	7,515	14	9.3	130	0.6	-					
	System	shut dow	n on 6/2	1/01 at 1	4:30. Sy	stem rest	arted on	6/28/01 at	6:30.			
6/28/01	6:30	7,540	26	21	78	6.3						

NOTES:

TCE = trichloroethene
acfm = actual cubic feet per minute
°F = degrees Fahrenheit
hrs = hours
in-wc = inches of water column
lb/day = pounds per day
lbs = pounds

PID = photoionization detector
ppmv = parts per million by volume
scfm = standard cubic feet per minute
tr = trace (concentration detected at less than reporting limit)
VOCs = volatile organic compounds
- = no measurement
< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. Well VMP-D1 was first used as an extraction well on 6 July 2000.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well VMP-D1 is screened in the deep vadose zone from 30 to 40 feet below ground surface.

TABLE 4h

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for April through June 2001

		Elapsed Time on	Fle	ow		Total	TCE		ted VOC al Rates		ulative Remova	
Date	Time	Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
,	Static va	por samp	le collec	cted on	3/16/00.						·	
3/16/00	10:50	5.6	0	0	0	76	39					
:	System s	startup on	3/16/00	at 16:0	0 with VM	IP-D2 use	ed as a m	onitoring v	vell.			
4/6/00 4/13/00	11:00 8:00	483 648	0 0	0 0	0 0	150 27	- -			<u> </u>		
;	System s	shut dowr	on 6/2	1/00 at 1	7:30. Sta	tic vapor	sample (collected o	n 7/6/00.			,
7/6/00	9:12	2,312	44	30	130	5.2	5.7	0.085	0.10	0	0	
;	System r	estarted o	on 7/6/0	0 at 10:0	00 with VI	MP-D2 op	erating a	s an extrac	tion well.			
7/13/00	12:00	2,485	41	26	145	5.8	- 1]				
7/20/00	7:30	2,648	42	27	150	3.8	-					
7/27/00	6:00	2,791	21	14	140	8.7	-					
8/3/00	8:00	2,961	21	14	140	4.8	-					
8/8/00	14:30	3,086	22	14	140	4.3	-					
	•						arted on	8/21/00 at 1	10:30.			
8/24/00	12:30	3,326	26	17	140	8.8	-					
;	System s	shut dowr	on 8/30	0/00 at 1	3:30. Sys	stem rest	arted on	8/31/00 at 9	9:00.			
8/31/00	9:00	3,471	18	13	120	1.5	-					
;	System s	shut dowr	on 9/6/	00 at 15	:00. Syst	em resta	rted on 9	/7/00.				
9/7/00	10:30	3,621	17	12	125	0.6	-					
9/14/00	9:00	3,788	17	11	140	9.6	0.71	0.0040	0.038	2.8	4.4	4A
	System s	shut dowr	on 9/14	I/00 at 1	1:23.							
9/28/00	9:35	3,788	42	29	125	39	9.3	-	-	-	-	
;	System r	estarted o	on 10/1/0	00 at 6:3	3O.							
10/1/00	6:30	3,791	-	-	-	-	-					
;	System s	shut dowr	on 10/1	I/00 at 1	0:30. Sys	stem rest	arted on	10/5/00 at 7	7:30.			
10/5/00	7:30	3,795	23	16	120	24	-					
10/12/00	8:00	3,964	26	18	120	9.1	-					
10/19/00	8:00	4,132	25	18	120	10	_					
10/26/00	8:00	4,301	19	14	115	26	-					
;	System s	shut dowr	on 10/3	31/00 at	9:20. Sys	stem rest	arted on	11/2/00 at 8	3:00.			

TABLE 4h

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for April through June 2001

		Elapsed	FI	ow		Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)		Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	23	15	140	0	-	-				
•	System s	shut dowr	on 11/2	2/00 at 1	9:00. Sys	stem rest	arted on	11/9/00 at 7	7:30.			
11/9/00	7:30	4,433	-	-	140	14	-					
	System s	shut dowr	n on 11/9	9/00 at 1	5:30. Sys	stem rest	arted on	11/16/00 at	10:00.			
11/16/00	10:00	4,441	_	_	140	15	_					
			ı	17/00 at	, ,		tarted or	1 11/23/00 a	at 7:30.			
11/23/00	7:30	4,443	47	31	140	63	_	 	· · · · · ·			
11/30/00	7:30	4,611	28	18	140	45	_					
					, ,		arted on	ı 12/7/00 at 8	3:00.			
12/7/00	8:00	4,768	11	7.4	140	40						
12/14/00	10:30	4,940	18	12	140	14	1.3	0.0078	0.091	3.0	7.5	4A
1		shut dow			'							
1/4/01	9:57	4,940		55	120	3.4	3.0	_	_	_	_	
1		ا restarted	ļ		' 1	5.4	3.0	_	_	_	_	
i	_					70 4						
2/19/01 2/22/01	15:45 17:00	4,940 5,016	21 21	14 14	140 140	73.4 81.9	-					
3/1/01	12:45	5,180	20	13	140	185.4	-					
3/8/01	7:30	5,343	22	14	145	153.3						
3/15/01	13:00	5,516	24	15	145	5.2						
3/22/01	13:00	5,682	15	10	145	3.2	-					
3/29/01	14:30	5,854	19	13	140	2.6	-					
4/5/01	10:00	6,016	17	11	140	4.7	-					
4/11/01	9:00	6,160	23	15	140	4.1	-					
4/18/01	12:30	6,331	22	15	135	5.0	-					
4/25/01	13:15	6,500	29	19	133	3.9	-					
5/2/01	11:45	6,666	27	18 10	135 135	3.4 3.1	-					
5/9/01 5/16/01	12:30 11:45	6,836 7,002	28 26	19 17	140	2.9	_					
5/23/01	11:00	7,002 7,169	29	19	140	1.7	_					
5/31/01	15:15	7,160	14	9.2	140	12	11	0.050	0.083	6.0	16	4A
)		, ,		l l	6/14/01 at 8			_	

TABLE 4h

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Fic	ow		Total	TCE	l	ted VOC al Rates	1	ulative Remova	
Date	M (t	Hour Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
6/14/01	10:15	7,360	42	30	110	3.0	5.4	-	-	-	-	
6/20/01	12:30	7,515	16	11	130	4.8	-					
	System	shut dow	on 6/2	1/01 at 1	4:30. Sys	stem rest	arted on	6/28/01 at (6:30.			
6/28/01	6:30	7,540	21	17	80	13	_	L <u>.</u>				

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. Well VMP-D1 was first used as an extraction well on 6 July 2000.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- 7. Extraction well VMP-D2 is screened in the deep vadose zone from 30 to 40 feet below ground surface.

TABLE 5 Field Data for Soil Vapor Monitoring Probes

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	VN	/P-1	٧٨	1P-2	VM	P-D1	VM	P-D2
Date	Vacuum	Total VOCs by PID (1,2)	Vacuum	Total VOCs by PID (1,2)	Vacuum	Total VOCs by PID (1,3)	Vacuum	Total VOCs by PID (1,3)
	(in-wc)	(ppmv)	(in-wc)	(ppmv)	(in-wc)	(ppmv)	(in-wc)	(ppmv)
3/16/00	-	68	-	150	_	530	_	71
3/17/00	1.8	-	1.0	-	4.7	-	5.2	-
3/18/00	1.3	-	1.1	-	6.6	-	6.0	-
3/19/00	1.1	-	0.7	-	2.2	-	2.4	-
3/20/00	2.1	-	1.4	-	2.6	-	3.5	-
3/21/00	2.4	-	2.2	-	5.4	-	6.8	-
3/22/00	2.6	-	2.3	-	5.8	-	4.5	-
3/30/00	1.8	-	1.8	-	15	-	16	-
4/6/00	2.8	6.4	4.2	7.4	23	3.5	24	150
4/13/00	4.0	8.2	2.5	6.2	21	23	22	27
5/11/00	4.6	-	4.0	-	19	-	16	-
5/18/00	3.2 `	-	3.4	· -	17	- `	18	-
3/10/00	3.8	-	2.7	-	21	-	22	-
7/6/00	-	0.0	-	2.6	-	-	-	-
7/13/00	2.6	-	1.9	-	_	-	-	-
7/20/00	2.9	-	2.1	-	-	-	-	-
7/27/00	2.6	-	1.9	-	-	-	-	-
9/14/00	5.2	0.5	2.4	0.7	-	-	-	-
9/28/00	-	1.3	-	2.4	-	-	-	-
10/26/00	11.5	13.2	11.5	2.2	-	-	-	-
12/14/00	7.3	-	0.6	-	-	-	-	-
1/4/01	-	0.9	-	0.4	-	-	-	-
6/14/01	_		0.1	0.0	•	-	-	_

NOTES:

in-wc = inches of water column
PID = photoionization detector

ppmv = parts per million by volume

VOCs = volatile organic compounds

- = no measurement

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Each shallow vapor monitoring probe was purged of approximately 5 to 7 cubic feet of vapor and then sampled and analyzed using a PID.
- 3. Each deep vapor monitoring probe was purged of approximately 50 to 65 cubic feet of vapor and then sampled and analyzed using a PID.
- 4. On days for which two vacuum and PID readings are provided, the values indicate initial and final readings during the site visit.
- 5. Probes VMP-D1 and VMP-D2 have been used as extraction wells since 6 July 2000. For data collected at wells VMP-D1 and VMP-D2, see Tables 4f and 4g, respectively.
- 6. Probe VMP-1 has been used as an extraction well since 8 March 2001 (see Table 4h).
- 7. Soil vapor monitoring probes VMP-1 and VMP-2 are screened in the shallow vadose zone from approximately 19 to 25 feet beneath the ground surface.
- 8. Soil vapor monitoring probes VMP-D1 and VMP-D2 are screened in the deep vadose zone from approximately 30 to 40 and 31 to 41 feet beneath the ground surface, respectively.

Erler & Kalinowski, Inc.

6 July 2001

TABLE 6
Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

										Analyte (Concentr	ation (pp	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
Blower	3/16/00	N	<21	<16	<16	8.2 tr	<13	<12	<14	<17	19	<9.2	860	49	<12	<12	-	
Influent	3/22/00	Υ	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	11	3.0 tr	490	3.9 tr	<4.6	<4.6	-	
1	4/13/00	Y	<2.1	<1.6	7.7	0.76 tr	<1.3	<1.2	0.91 tr	0.90 tr	1.2	<0.92	70	2.1	<1.2	<1.2	-	
	DUP	Y	<2.1	<1.6	8.5	0.72 tr	<1.3	<1.2	<1.4	<1.7	1.1	<0.92	65	1.8	<1.2	<1.2	-	
	5/18/00	Y	<2.1	<1.6	<1.6	<1.3	<1.3	<1.2	<1.5	<1.7	2.2	<0.93	53	<1.3	<1.2	<1.2	-	
	7/6/00	N	2.2	0.56 tr	1.6	0.51	<0.51	<0.46	0.48 tr	<0.68	0.82	0.19 tr	37	<0.53	0.50	<0.46	Bromomethane Chloroform CFC-11 CFC-113 1,1-DCA	0.37 tr 0.37 tr 0.35 tr 0.38 0.26 tr
	7/13/00	Y	<0.84	10	<0.64	0.36 tr	<0.51	0.66	<0.58	<0.68	0.82	<0.37	18	<0.53	0.67	<0.46	-	
	9/14/00	Υ	<0.21	10	<0.16	0.27	<0.13	0.20	<0.14	<0.17	0.25	<0.09	5.6	0.75	0.62	0.14	-	
	9/28/00	N	<0.84	14	<0.64	0.48 tr	<0.50	0.75	<0.58	<0.68	0.95	<0.37	54	1.0	1.2	0.28 tr	•	
ļ	10/26/00	Y	<0.08	3.8	<0.06	0.10	<0.05	0.14	<0.06	<0.07	0.23	<0.04	2.3	0.36	0.43	0.16	-	
,	12/14/00	Y	<0.17	4.1	<0.13	0.16	<0.10	0.16	<0.12	<0.14	1.4	<0.073	6.7	0.47	0.50	0.29	1,2-DCB	0.048 tr
Ì	1/4/01	N	<1.1	1.3	<0.80	<0.63	<0.63	<0.58	<0.72	<0.85	0.42	<0.46	30	0.45 tr	0.32 tr	<0.58	-	
	5/31/01	Υ	<0.28	1.4	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	1.8	<0.12	6.8	<0.18	<0.15	<0.15	-	
	DUP	Y	<0.28	1.5	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	1.8	<0.12	7.0	<0.18	<0.15	<0.15	-	
	6/14/01	l N	<1.1	<0.78	<0.80	<0.63	<0.63	<0.58	0.90	<0.85	0.75	<0.46	46	<0.66	<0.58	<0.58	-	
	DUP	N	<1.1	<0.78	<0.80	<0.63	<0.63	<0.58	0.73	<0.85	0.74	<0.46	44	<0.66	<0.58	<0.58	<u> </u>	

TABLE 6 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

										Analyte (Concentr	ation (pp	mv)					18.1
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
SVE-1	3/16/00	N	<210	<160	<160	<130	<130	<120	<140	<170	230	53 tr	10,000	170	<120	<120	-	
	3/22/00	Υ	<84	<63	<64	<50	<50	<46	<58	<68	140	43	10,000	42 tr	<46	<46	-	
	4/13/00	Υ	<210	<160	<160	<130	<130	<120	<140	<170	120	<92	6,500	<130	<120	<120	-	
	5/18/00	Υ	<17	<13	<13	<10	<10	<9.2	<12	<14	94	7.3 tr	3,700	<11	<9.2	<9.2	-	
	7/6/00	N	<42	<31	63	<25	<25	<23	<29	<34	110	<19	3,300	<27	<23	<23	-	
	7/13/00	Y	<21	<16	<16	<13	<13	<12	<15	<17	60	<9.3	2,200	<13	<12	<12	•	
	9/14/00	Υ	<17	<13	<13	<10	<10	<9.2	<12	<14	9.1	<7.3	300	6.7 tr	5.1 tr	<9.2	-	
	9/28/00	N 	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	7.1	<3.7	230	<5.3	<4.6	<4.6	•	
	10/26/00	Y	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	3.9	<1.8	140	<2.7	<2.3	<2.3	-	
	12/14/00	Y	3.1 tr	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	8.1	<1.8	260	4.3	<2.3	<2.3	-	1
	1/4/01	N N	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	5.5	<3.7	350	<5.3	<4.6	<4.6	-	
	5/31/01	Y	<0.28	1.1	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	3.3	<0.12	7.8	<0.18	<0.15	<0.15	-	
6VE 0	6/14/01	N	<0.42	<0.31	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	3.9	<0.18	11	<0.27	<0.23	<0.23	-	
SVE-2	3/16/00 DUP	N N	<1.7	<1.3 <1.3	<1.3 <1.3	0.72 tr	<1.0	<0.92	<1.2	<1.4	1.2	<0.73	75	<1.1	<0.92	<0.92	-	
	7/6/00	N N	<1.7 <4.2	<3.1		0.80 tr <2.5	<1.0 <2.5	<0.92 <2.3	<1.2 <2.9	<1.4	1.5	<0.73	96	1.3	<0.92	<0.92	- Chlassform	4 4 4 11
1	9/14/00	N Y	<2.1	<1.6	6.6 <1.6	<1.3	<1.3	<1.2	<1.4	<3.4 <1.7	3.6 0.98	<1.9 <0.92	120 77	<2.7	<2.3	<2.3	Chloroform	1.4 tr
	9/28/00	N N	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.4 tr	<1.8	110	<1.3 <2.7	<1.2 <2.3	<1.2 <2.3	-	
	12/14/00	Y	0.40 tr	<0.31	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	0.74	<0.18	29	1.1	<0.23	<0.23	-	
1	1/4/01	l 'N	<1.1	<0.78	<0.80	< 0.63	<0.63	<0.58	<0.72	<0.85	0.74	<0.46	34	<0.66	<0.23	<0.23	-	
	5/31/01	Ϋ́	<0.42	0.83	<0.32	<0.05	<0.05	<0.23	<0.72	<0.34	1.2	<0.48	10	<0.27	<0.33	<0.23	-	
	6/14/01	N N	<0.42	< 0.63	<0.64	<0.50	<0.50	<0.46	<0.58	<0.68	0.52	<0.10	22	<0.53	<0.46	<0.46		
SVE-3	3/16/00	N	<0.84	< 0.63	<0.64	0.56	<0.50	<0.46	<0.58	<0.68	2.7	<0.37	25	<0.53	<0.46	<0.46		
••	7/6/00	N	<0.21	<0.16	<0.16	0.19	<0.13	<0.12	<0.15	0.19	3.7	<0.093	7.4	<0.13	<0.12	<0.12		
	9/14/00	Y	<0.08	<0.06	<0.06	0.11	<0.05	<0.05	<0.06	<0.07	2.2	0.07	2.5	0.06	0.08	0.03 tr	_	
	9/28/00	N	<0.21	<0.16	<0.16	0.16	<0.13	<0.12	<0.14	0.56	3.8	0.095	3.8	<0.13	<0.12	<0.12	_	j
	12/14/00	Y	<0.042	<0.031	<0.032	0.035	<0.025	<0.023	<0.029	<0.034	1.4	0.038	1.2	0.070	<0.023	<0.023	MTBE	0.031
	1/4/01	N	<0.084	<0.063	<0.064	0.034 tr	<0.050	<0.046	<0.058	<0.068	1.4	0.036 tr	1.3	<0.053	<0.046	<0.046	-	
	5/31/01	Y	<0.21	1.1	<0.16	0.13	<0.13	<0.12	<0.14	<0.17	1.8	<0.092	5.0	<0.13	0.13	<0.12	-	
	6/14/01	N	<0.042	<0.031	<0.032	0.033	<0.025	0.032	<0.029	0.58	0.59	<0.018	1.6	0.093	0.16	0.067	-	

TABLE 6 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

										Analyte (Concentr	ation (pp	nv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
VMP-1	3/16/00	N	<0.84	<0.63	<0.64	0.58	<0.50	<0.46	<0.58	<0.68	1.0	<0.37	29	<0.53	<0.46	<0.46	-	
	7/6/00	N	0.022	0.0011 tr	0.0043	0.011	<0.0013	0.0015	0.0010 tr	0.012	0.0028	0.0017	0.13	0.0045	0.0085	0.0039	Chloromethane Chloroform CFC-11 CFC-113 1,1-DCA MTBE	0.0021 tr 0.00054 tr 0.00081 tr 0.00060 tr 0.0023 0.0017
	9/14/00	Y	0.097	0.0078	<0.0064	<0.0050	<0.0050	0.0041 tr	0.0033 tr	0.089	0.025	<0.0037	0.29	0.022	0.023	0.0010	2-Hexanone Styrene	0.0090 0.0045 tr
	9/28/00	N	0.071	<0.013	<0.013	<0.010	<0.010	<0.0092	<0.012	0.061	0.040	<0.0073	0.47	0.0059 tr	0.0087 tr	0.0046 tr	_	
	1/4/01	N	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	< 0.034	0.099	<0.018	0.93	0.022 tr	0.032	0.014 tr	-	
	5/31/01	Y	<0.42	2.4	0.42	0.32	<0.25	<0.23	0.30	< 0.34	2.8	<0.18	9.7	<0.27	<.0.23	<0.23	-	
	6/14/01	N	0.021	0.010	<0.0064	0.0086	<0.0050	0.026	<0.0058	0.019	0.029	0.0051	0.27	0.085	0.12	0.050	-	
VMP-2	3/16/00	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.92	<1.2	<1.4	2.0	<0.73	43	1.5	<0.92	<0.92	-	
	7/6/00	N	<0.14	<0.10	<0.11	<0.085	<0.085	<0.077	<0.097	<0.11	0.24	<0.062	5.2	<0.089	<0.077	<0.077	-	
	9/14/00	Y	0.25	0.0091	<0.0080	<0.0063	0.011	0.0050 tr	0.0040 tr	0.21	0.18	0.011	0.52	0.027	0.027	0.012	2-Hexanone 4-Methyl-2-Pentanone Styrene	0.0018 0.0054 tr 0.0054 tr
	9/28/00	N	0.053	<0.013	<0.013	<0.010	0.010	<0.0092	<0.012	0.050	0.22	0.0070 tr	0.52	0.0076 tr	0.013	0.0067 tr	2-Hexanone	0.0076 tr
	1/4/01	N	0.015	<0.0078	<0.0080	<0.0063	0.0038 tr	0.0032 tr	<0.0072	<0.0085	0.029	<0.0046	0.13	0.015	0.014	0.0058	MTBE	0.0037 tr
	5/31/01	Y	0.15	0.0048	<0.0016	<0.0013	<0.0013	0.0063	<0.0014	0.051	0.024	0.0059	0.057	0.024	0.031	0.013	2-Hexanone	0.0060
	6/14/01	N	0.057	0.0066	<0.0064	<0.0050	<0.0050	0.016	<0.0058	0.018	0.049	0.0043	0.23	0.055	0.076	0.031	4-Methyl-2-Pentanone -	0.0021

TABLE 6
Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

										Analyte	Concentr	ation (pp	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
SVE-D1	3/16/00	N	<42	<31	<32	<25	<25	<23	<29	<34	16	<18	1,000	<27	<23	<23	-	
	3/22/00	Υ	<8.4	<6.3	<6.4	11	<5.0	<4.6	<5.8	<6.8	6.4	<3.7	440	3.2 tr	<4.6	<4.6	-	
	4/13/00	Y	<1.1	<0.78	1.2	0.99	0.87	<0.58	<0.72	<0.85	0.28 tr	<0.46	25	0.40 tr	<0.58	<0.58	-	
	5/18/00	Y	<0.42	0.19 tr	<0.32	0.30	0.30	<0.23	<0.29	<0.34	0.57	<0.19	8.6	<0.27	<0.23	<0.23	-	
	7/6/00	N	5.3	<1.6	3.3	0.66 tr	<1.3	<1.2	<1.5	<1.7	1.6	<0.93	92	0.90 tr	<1.2	<1.2	Chloroform	0.79 tr
	DUP	N	<2.1	<1.6	4.3	0.92 tr	<1.3	<1.2	<1.5	<1.7	1.5	<0.93	93	<1.3	<1.2	<1.2	Chloroform	0.98 tr
										<u> </u>							CFC-11	0.67 tr
													[CFC-113	0.76
	7/13/00	Y	<0.42	25	<0.32	<0.25	<0.25	1.5	<0.29	<0.34	<0.15	<0.19	5.1	0.24 tr	1.4	<0.23	-	
1	9/14/00	Y	<0.84	40	<0.64	<0.50	<0.50	1.1	<0.58	<0.68	0.16 tr	<0.37	4.0	3.7	3.6	0.81	-	
1	DUP	Y	<0.84	32	<0.64	<0.50	<0.50	0.59	<0.58	<0.68	<0.30	<0.37	2.9	2.4	1.8	0.41 tr	-	
	9/28/00	N	<4.2	21	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	0.96 tr	<1.8	120	<2.7	<2.3	<2.3	-	
	DUP	N	<4.2	23	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.1 tr	<1.8	130	<2.7	<2.3	<2.3	-	
	10/26/00	Y	<0.17	11	<0.13	<0.10	<0.10	0.31	<0.12	<0.14	0.05 tr	<0.07	2.4	1.0	1.1	0.44	-	
	12/14/00	Y	<0.084	2.6	<0.064	<0.050	<0.050	<0.046	<0.058	<0.068	0.10	<0.037	2.7	0.19	0.20	0.14	-	
	DUP	Y	<0.084	2.6	<0.064	<0.050	<0.050	<0.046	<0.058	<0.068	0.093	<0.037	2.7	0.18	0.17	0.12	-	
1	1/4/01	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.092	<1.2	<1.4	0.32 tr	<0.73	41	<1.1	<0.92	<0.092	-	
	DUP	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.092	<1.2	<1.4	0.35 tr	<0.73	45	<1.1	<0.92	<0.092	-	
	5/31/01	Y	<0.21	1.2	<0.16	<0.13	<0.13	<0.12	<0.14	<0.17	0.11	<0.092	6.4	0.14	0.18	<0.12	-	
	6/14/01	N	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	<1.5	<1.8	140	<2.7	<2.3	<2.3	-	
VMP-D1	3/16/00	N	<17	<13	<13	5.8 tr	<10	<9.2	<12	<14	8.3	<7.3	460	11	<9.2	<9.2	-	
Ì	7/6/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.15	1.5	0.17	<0.093	9.4	<0.13	<0.12	<0.12	-	
	9/14/00	Y	<0.042	0.020 tr	<0.032	<0.025	0.039	0.013 tr	<0.029	<0.034	0.27	<0.018	1.4	0.061	0.081	0.037	Styrene	0.025
	9/28/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.14	<0.17	0.38	<0.092	8.6	<0.13	<0.12	<0.12	-	
	12/14/00	Υ	<0.042	<0.031	<0.032	<0.025	0.022 tr	<0.023	<0.029	<0.034	0.25	<0.018	0.95	0.046	<0.023	<0.023	-	
	1/4/01	N	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.030	<0.018	1.6	0.014 tr	0.020 tr	<0.023	-	
	5/31/01	Y	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.40	<0.018	1.1	0.072	0.10	<0.023	Styrene	0.043
	6/14/01	N	<0.14	<0.10	<0.11	<0.084	<0.084	<0.077	0.13	<0.11	0.11	<0.061	5.7	<0.088	0.15	<0.077	<u> </u>	

TABLE 6 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

										Analyte (Concentr	ation (pp	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
VMP-D2	3/16/00	N	<0.84	<0.63	<0.64	1.2	<0.50	<0.46	<0.58	<0.68	0.75	<0.37	39	0.83	<0.46	<0.46	-	
	7/6/00	N	<0.21	<0.16	0.28	0.55	0.069 tr	<0.12	<0.15	0.34	0.35	<0.093	5.7	<0.13	<0.12	<0.12	1,1-DCA	0.067 tr
	9/14/00	Y	<0.08	5.6	<0.06	0.95	0.05 tr	0.20	<0.06	<0.07	0.14	<0.04	0.71	0.35	0.46	0.10	Chlorobenzene	0.29
		!															Chloroform	0.60
																l i	1,1-DCA	0.08
																:	1,2-DCB	0.02 tr
	ĺ	•									_			1			1,4-DCB	0.05
														ļ			Styrene	0.03 tr
	9/28/00	N	<0.42	25	<0.32	1.1	<0.25	1.4	<0.29	< 0.34	0.50	<0.18	9.3	2.2	2.3	0.27	Chlorobenzene	0.25
	12/14/00	Y	<0.17	9.9	<0.13	0.45	<0.10	0.46	<0.12	<0.14	3.6	<0.073	1.3	1.2	1.3	0.74	1,1-DCA	0.056 tr
	1								İ					1	1		1,2-DCB	0.13
																	1,4-DCB	0.079
	1/4/01	N	<0.11	1.8	<0.080	0.068	<0.063	0.12	<0.072	<0.085	0.17	<0.046	3.0	0.20	0.23	0.098	- -	
	5/31/01	Y	<0.42	2.7	0.45	0.37	<0.25	<0.23	<0.29	< 0.34	3.8	<0.18	11	0.38	<0.23	<0.23	<u>-</u>	
	6/14/01	N	<0.21	0.66	<0.16	0.16	<0.13	<0.12	0.26	<0.17	0.59	<0.092	5.4	<0.13	0.20	<0.12		

TABLE 6 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

									-	Analyte (Concentr	ation (pp	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
Equipment	3/16/00	-	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.064	<0.018	1.7	<0.027	<0.023	<0.023	-	
Blank	7/6/00	-	0.0071	0.00076	0.0011	<0.00025	<0.00025	0.00094	0.00033	0.0018	0.0016	<0.00019	0.00042	0.0037	0.0062	0.0029	Carbon Tet	0.00014 tr
									,								CFC-11	0.00046
																	CFC-113	0.00013
																	Chloromethane	0.00077
																	1,2-DCB	0.00010 tr
																	MTBE	0.0018
}							,				_						Styrene	0.00028
	9/14/00	-	0.016	0.0055	<0.0016	<0.0013	<0.0013	0.0038	0.0076	0.0044	0.00047 tr	<0.00092	0.0013	0.021	0.022	0.010	MTBE	0.0039
																	Styrene	0.0059
	9/14/00	-	0.0097	0.0044	<0.0016	<0.0013	<0.0013	0.0022	0.0029	0.0018	0.0011	<0.00092	0.014	0.011	0.012	0.0055	MTBE	0.0026
								:									Styrene	0.Q029
	9/28/00	-	0.0094	0.0022 tr	<0.0032	<0.0025	<0.0025	0.0021 tr	0.027	0.0019 tr	<0.0015	<0.0018	<0.0019	0.0090	0.014	0.0073	MTBE	0.0032
	0.000.000																Styrene	0.0022 tr
1	9/28/00	-	0.0078	0.0031	<0.0032	<0.0025	<0.0025	0.0015 tr	<0.0029	<0.0034	0.00093 tr		0.015	0.0052	0.0066	0.0031	MTBE	0.0026 tr
1	1/4/01	-	0.015	0.0019	<0.0016	<0.0013	<0.0013	0.0035	0.0027	0.0050	<0.00074	<0.00092	0.0011	0.018	0.015	0.0063	MTBE	0.0037
		!													:		Styrene	0.00061 tr
1 !															ļ		Vinyl Acetate	0.0031
	4/4/04			0.0046	10 0040	10.0040	-0.0040	0.0046		0.0040		.0.0000					Vinyl Chloride	0.0013 tr
	1/4/01	_	0.014	0.0016	<0.0016	<0.0013	<0.0013	0.0019	0.0021	0.0016 tr	0.00080	<0.00092	0.0085	0.013	0.0079	0.0032	MTBE	0.0027
	5/31/01	-	0.0082	0.0045	<0.0032	<0.0025	<0.0025	0.0041	0.0029	0.0034	0.0051	0.0023	0.012	0.017	0.020	0.0084	-	
	6/14/01	<u> </u>	0.025	0.0041	<0.0032	<0.0025	<0.0025	0.0093	0.0052	<0.0034	0.0019	<0.0018	0.075	0.034	0.044	0.019	MTBE	0.0044

6 July 2001

TABLE 6

Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	<u> </u>									Analyte	Concentr	ation (pp	mv)				
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other

NOTES: Carbon Tet = Carbon tetrachloride

CFC-11 = Trichlorofluoromethane

CFC-113 = Trichlorotrifluoroethane

1,1-DCA = 1,1-Dichloroethane

1,2-DCB = 1,2-Dichlorobenzene

1,4-DCB = 1,4-Dichlorobenzene

1,1-DCE = 1,1-Dichloroethene

c-1,2-DCE = cis-1,2-Dichloroethene

MEK = Methyl ethyl ketone (aka 2-Butanone)

MTBE = Methyl tert-butyl ether

PCE = Tetrachloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

DUP = Duplicate sample

ppmv = parts per million by volume

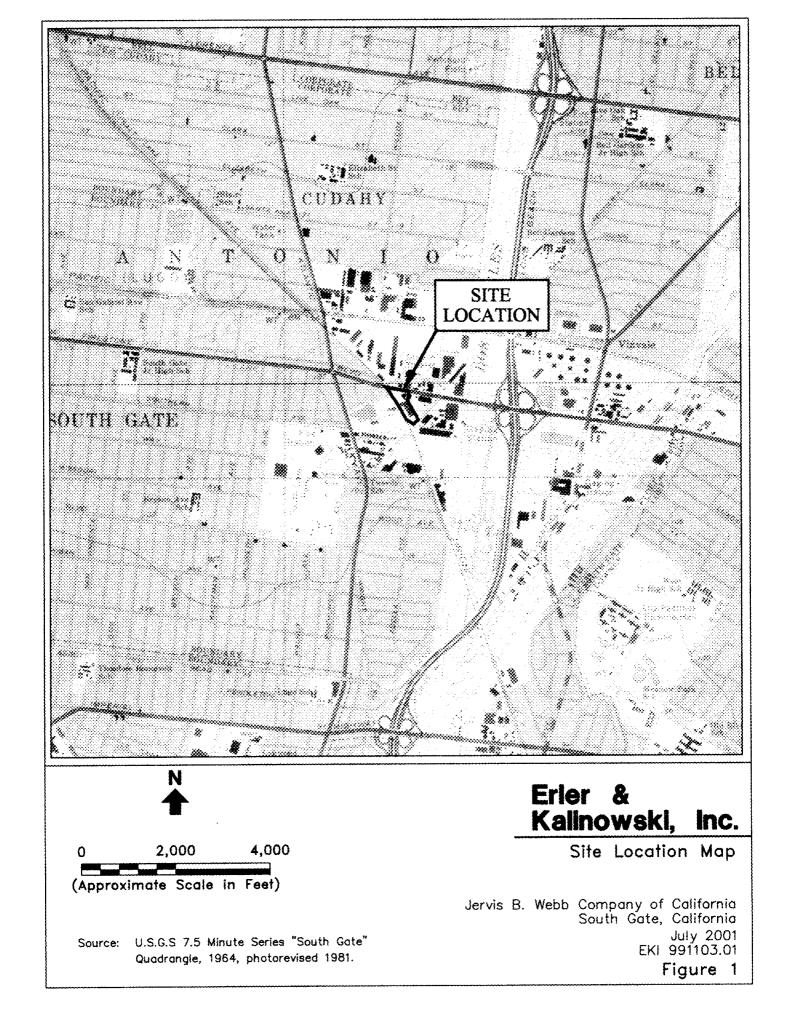
tr = trace (concentration detected at less than method detection limit)

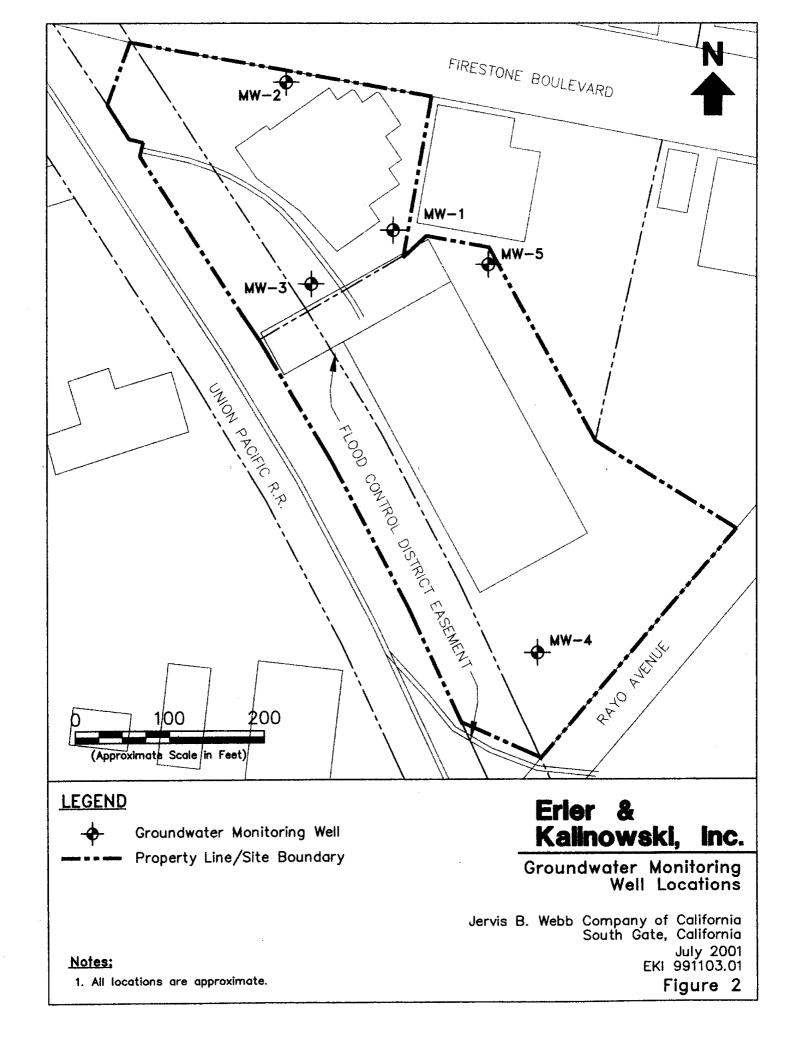
ug/l = micrograms per liter

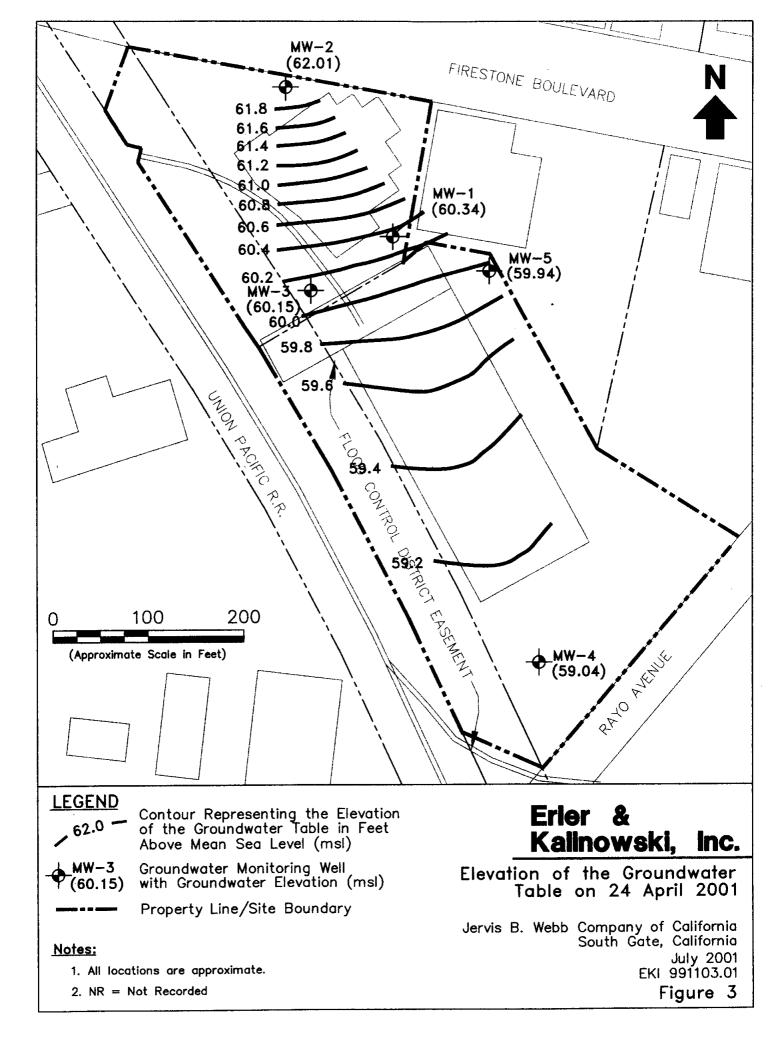
- = no measurement

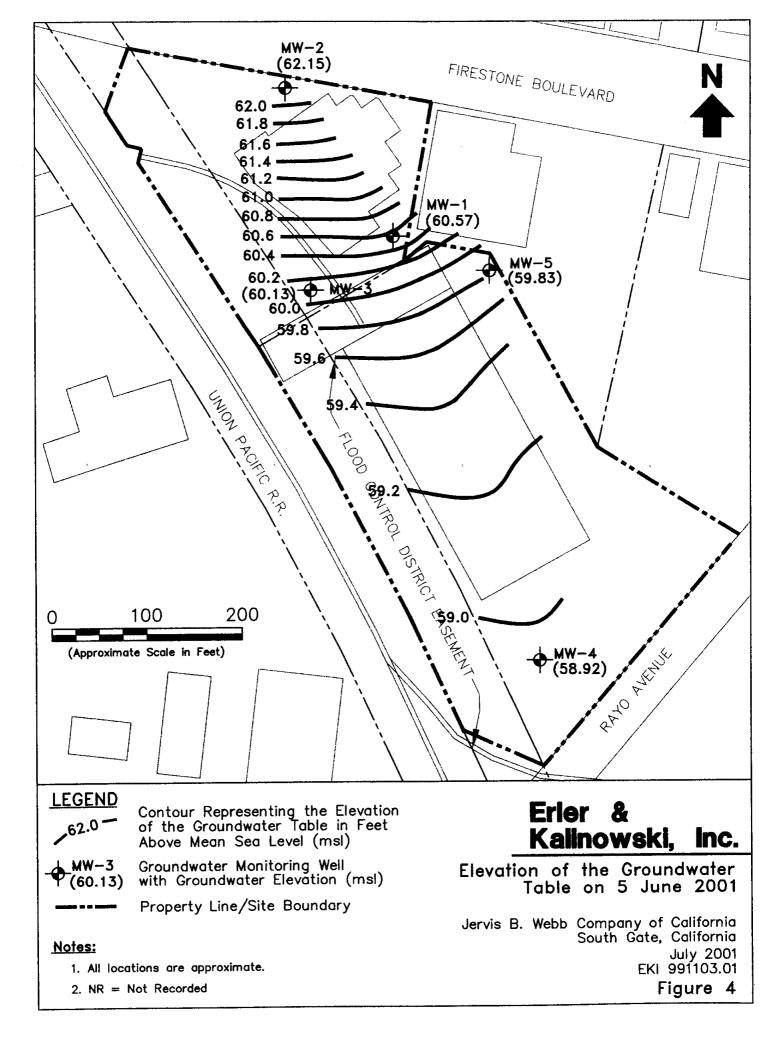
< = not detected at indicated method detection limit

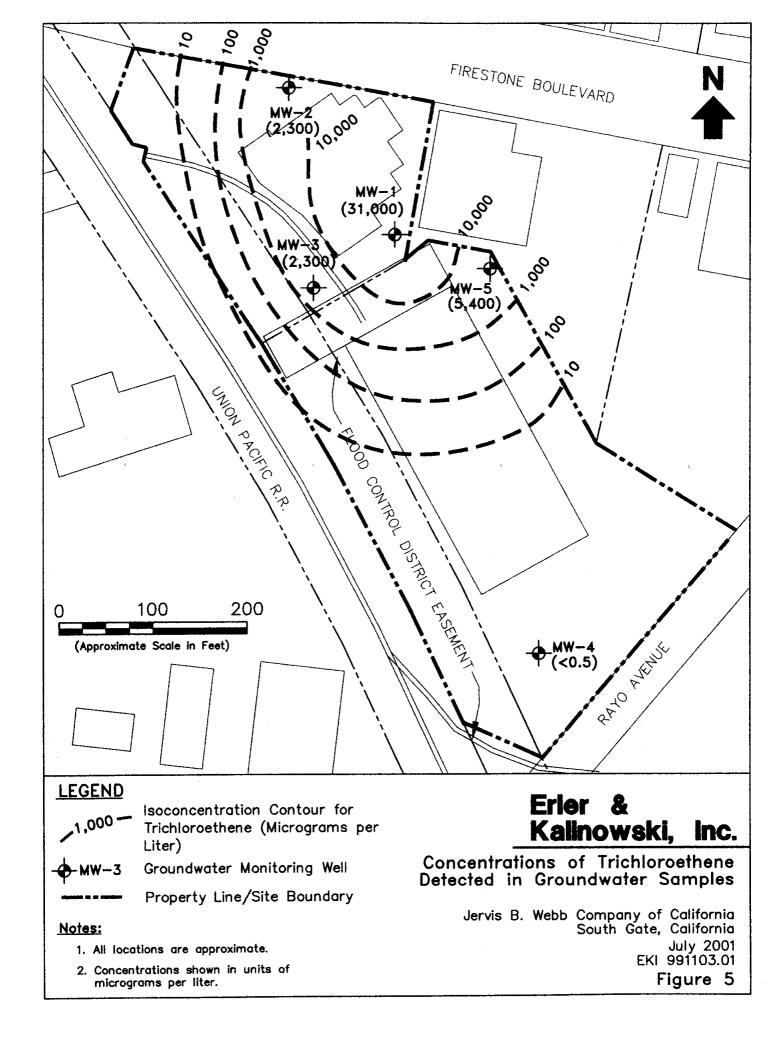
- 1. Samples were collected in Tedlar bags and analyzed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- 2. Wells SVE-1, SVE-2, and SVE-3 are shallow zone extraction wells. Probes VMP-1 and VMP-2 are shallow zone monitoring probes. Well SVE-D1 is a deep zone extraction well. Wells VMP-D1 and VMP-D2 have been used as deep zone extraction wells since 6 July 2000. Wells VMP-D1 and VMP-D2 were used as deep zone monitoring probes prior to 6 July 2000.

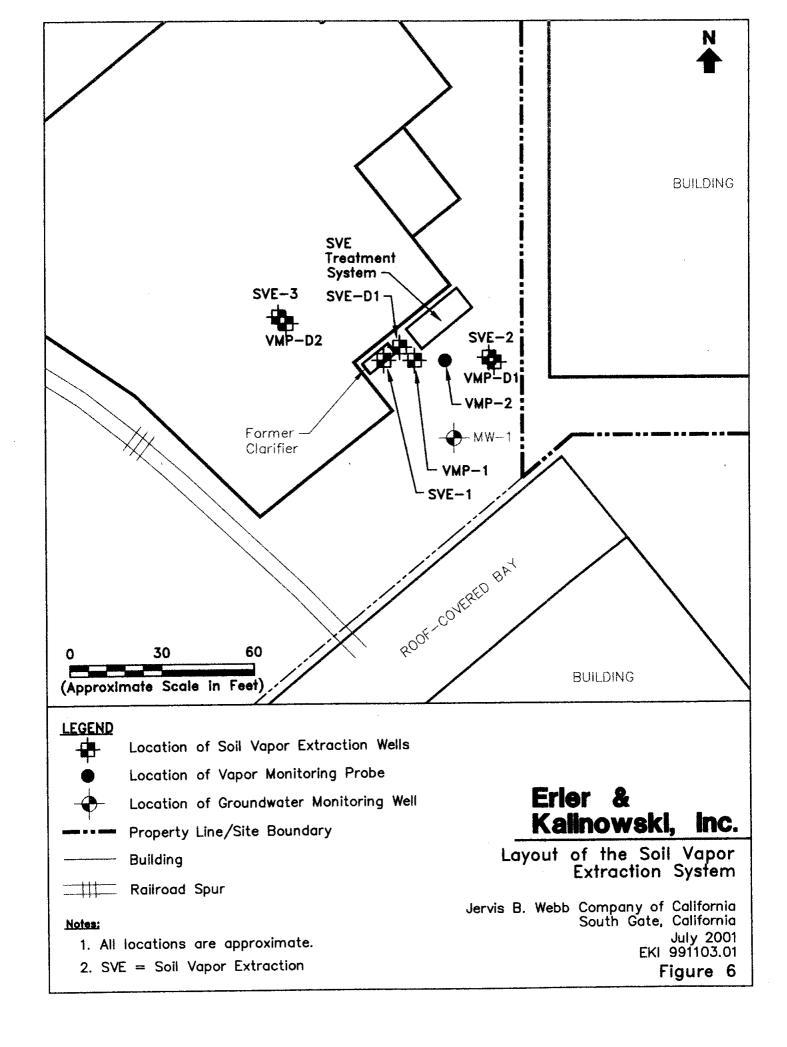












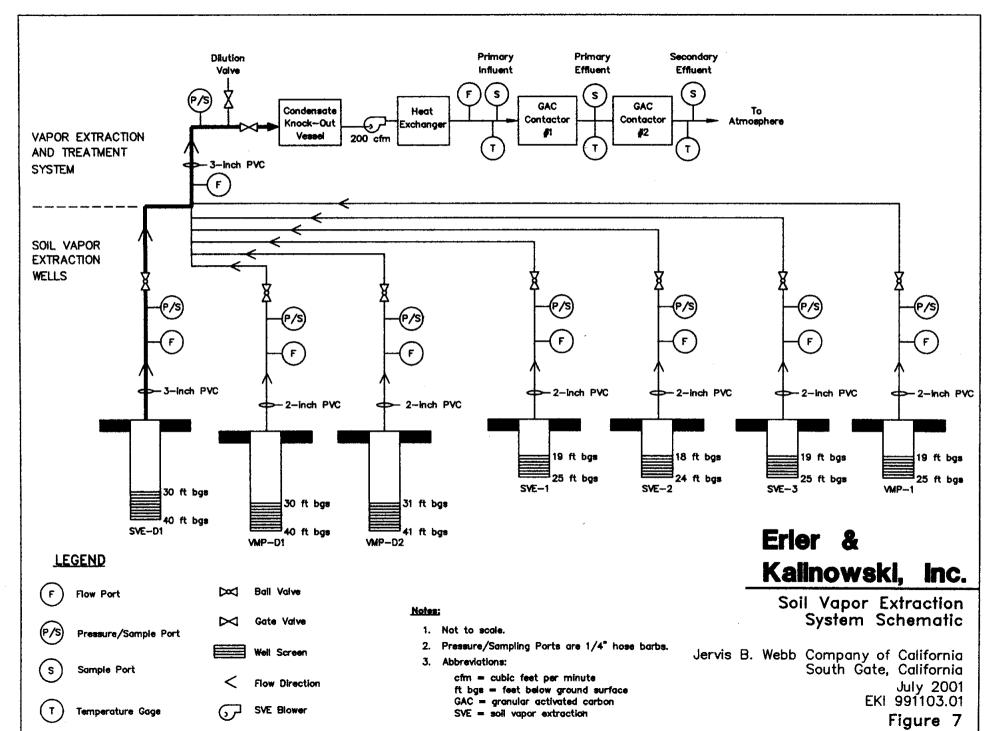
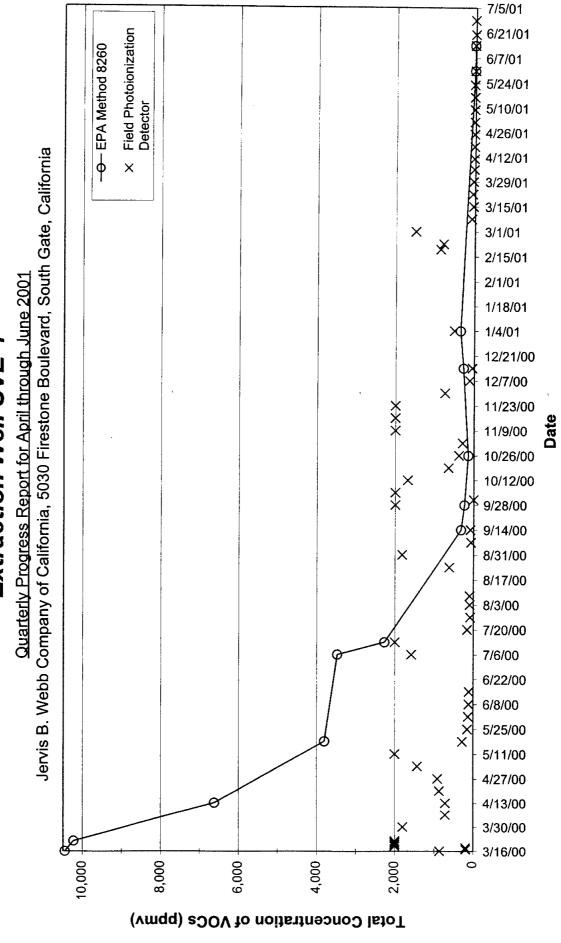


FIGURE 8a Concentrations of Total VOCs versus Time: Blower Influent

7/5/01 6/21/01 Field Photoionization Detector -O-EPA Method 8260 6/7/01 5/24/01 5/10/01 4/26/01 Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California 4/12/01 × 3/29/01 3/15/01 3/1/01 2/15/01 Quarterly Progress Report for April through June 2001 2/1/01 1/18/01 1/4/01 12/21/00 × × × 12/7/00 11/23/00 Date X 11/9/00 10/26/00 10/12/00 X 9/28/00 9/14/00 8/31/00 8/17/00 8/3/00 7/20/00 7/6/00 6/22/00 6/8/00 5/25/00 5/11/00 4/27/00 4/13/00 3/30/00 3/16/00 2,000 * 200 0 1,500 1,000 Total Concentration of VOCs (ppmv)

Erler & Kalinowski, Inc.

FIGURE 8b Total Concentrations of VOCs versus Time: Extraction Well SVE-1



EKI 991103.01 2001-Q2 Table 4 & Figures 8-9

Erler & Kalinowski, Inc.

FIGURE 8c Concentrations of Total VOCs versus Time: Extraction Well SVE-2

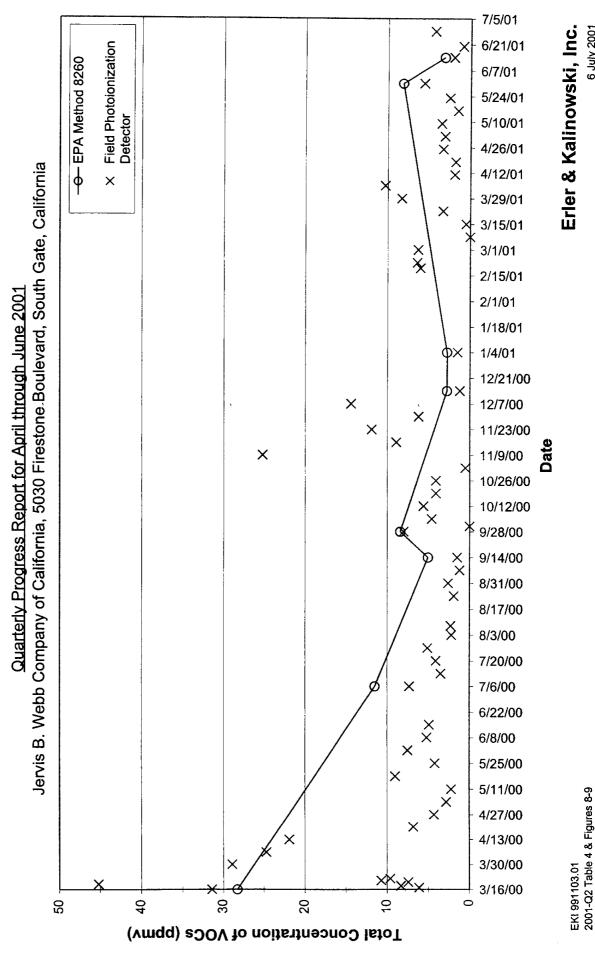
6/21/01 Field Photoionization Detector -O- EPA Method 8260 6/7/01 5/24/01 5/10/01 4/26/01 Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California 4/12/01 × 3/29/01 3/15/01 3/1/01 2/15/01 Quarterly Progress Report for April through June 2001 2/1/01 1/18/01 1/4/01 ΦX 12/21/00 12/7/00 11/23/00 11/9/00 × 10/26/00 10/12/00 9/28/00 X 9/14/00 8/31/00 8/17/00 × × × 8/3/00 7/20/00 7/6/00 6/22/00 6/8/00 5/25/00 5/11/00 4/27/00 4/13/00 3/30/00 3/16/00 , 200 200 800 900 400 0 Total Concentration of VOCs (ppmv)

EKI 991103.01 2001-Q2 Table 4 & Figures 8-9

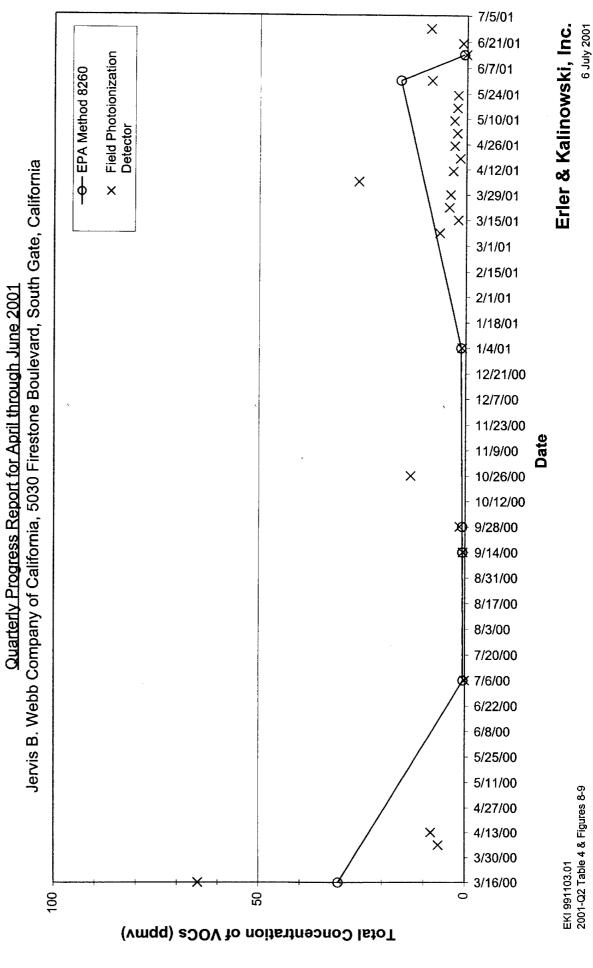
7/5/01

Erler & Kalinowski, Inc.

Concentrations of Total VOCs versus Time: Extraction Well SVE-3 **FIGURE 8d**

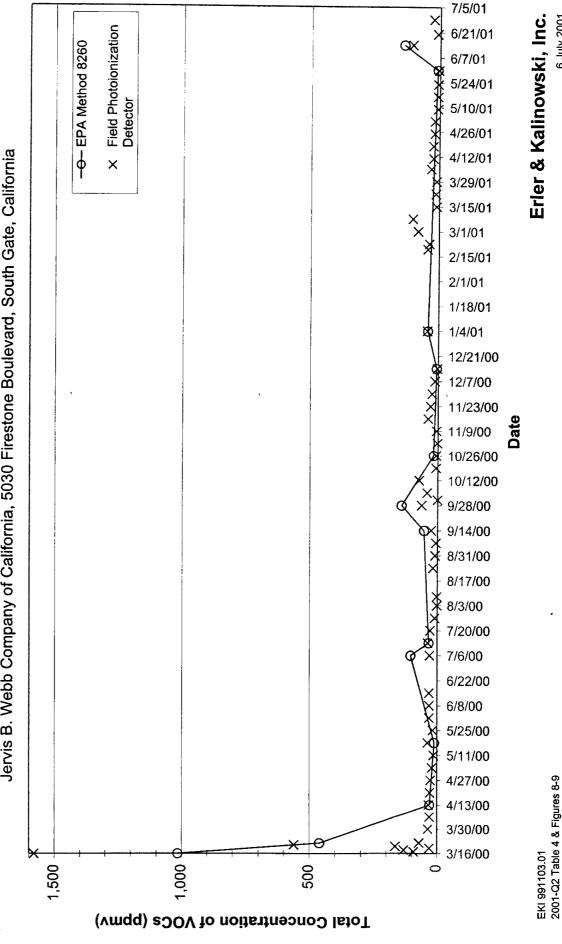


Concentrations of Total VOCs versus Time: Extraction Well VMP-1 FIGURE 8e

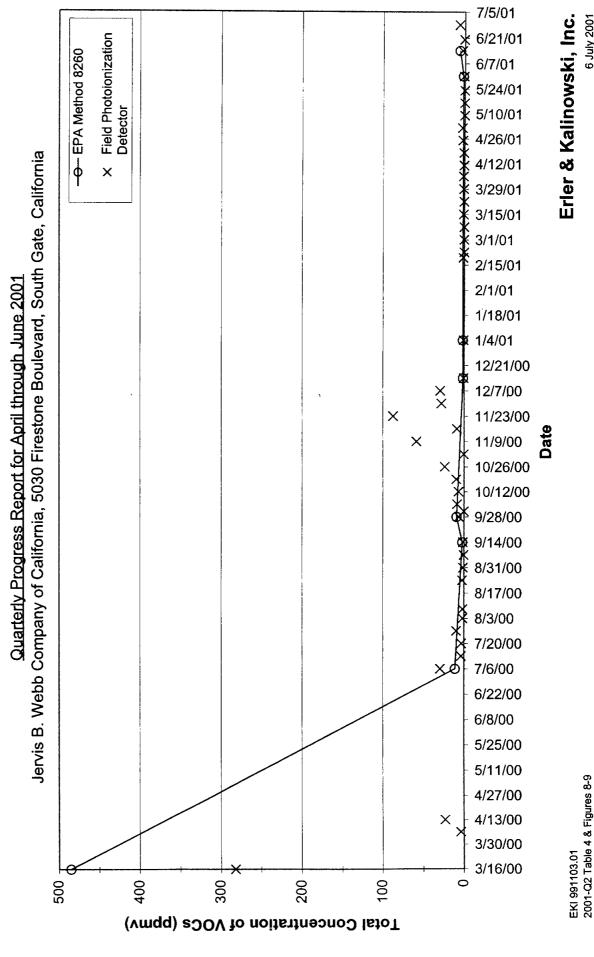


Concentrations of Total VOCs versus Time: Extraction Well SVE-D1 **FIGURE 8**f

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California Quarterly Progress Report for April through June 2001



Concentrations of Total VOCs versus Time: Extraction Well VMP-D1 FIGURE 8g



Concentrations of Total VOCs versus Time: Extraction Well VMP-D2 **FIGURE 8h**

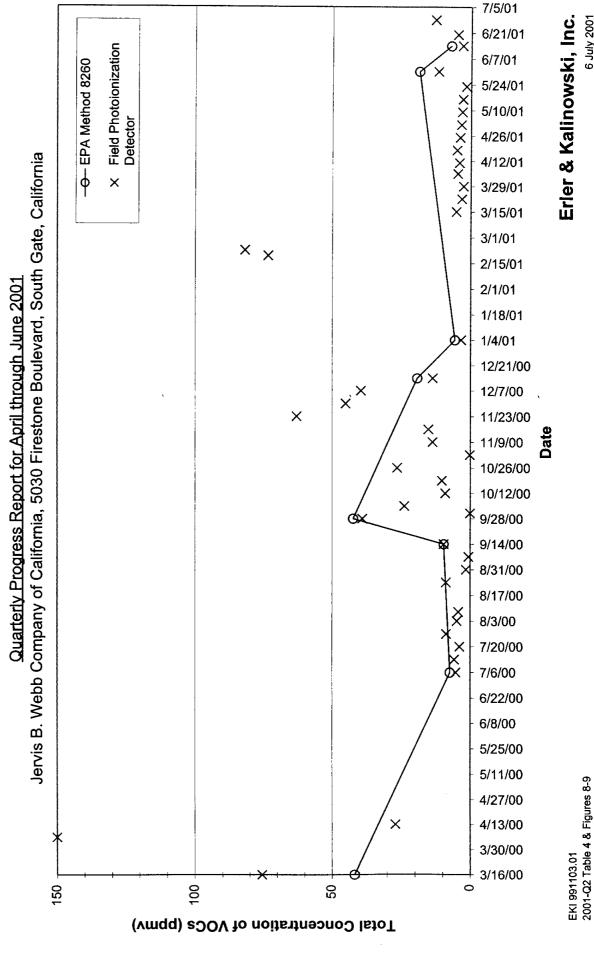
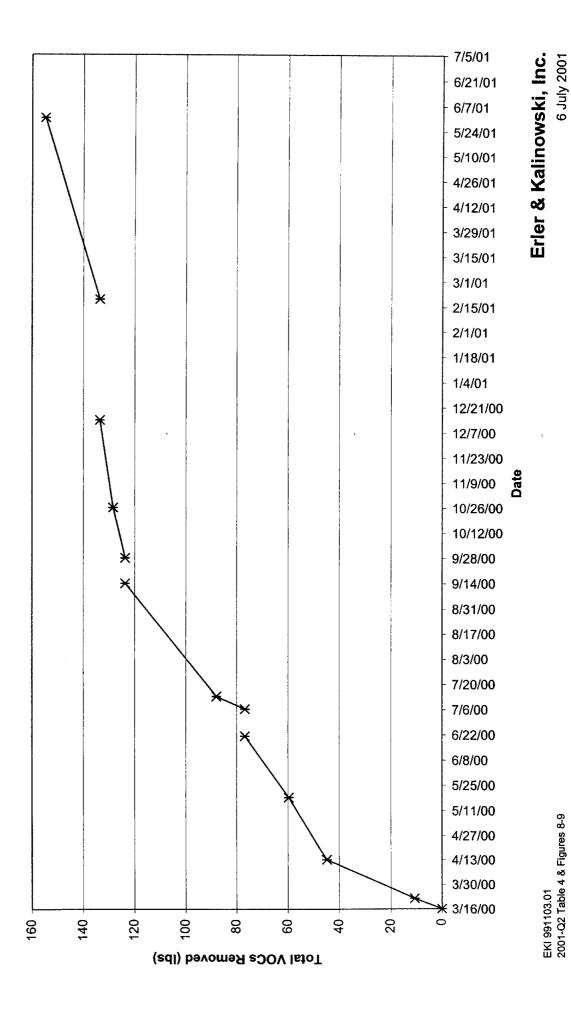


FIGURE 9
Cumulative VOC Removal

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California Quarterly Progress Report for April through June 2001



APPENDIX A

Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling

GROUNDWATER PURGE AND WATER QUALITY MONITORING FORM

DATE: 6-5-01 PROJECT NAME: WELL PERSONNEL: BLIGGETT PROJECT NUMBER: 99 1103.01 WELL NUMBER: MW-/ WELL VOLUME CALCULATION: Depth of Water Multiplier Depth to Casing Vol. Well (ft.) Column (ft.) (below) Water (ft.) (gallons) 246 * 64 = 15.75/ 70.13-45.52 Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. INSTRUMENT CALIBRATION No. of bailers prior to start of purge: Field Standard Instrument measure measure PURGE METHOD: GROUNDPUMP. Conductivity PURGE DEPTH: 65 рΗ SEE MW-4 рΗ END TIME: 15:01 **Turbidity** START TIME: 14:42 Temperature TOTAL GALLONS PURGED: 53 Depth Probe 4:55 14:45 15:00 14:42 14:52 Volume Purged (gallons) 30 50 10 20 40 Temperature (degrees F or C) 74.7 75.4 81,7 77.4 フェ・フ pH (units) 9.43 9.45 B. 17 2.47 8.87 Specific Conductivity (uS/cm) 1030 890 1050 1600 2240 Turbidity/Color (NTU) 0.14 6.65 1.76 0.36 0.56 Odor Depth to Water (ft below TOC) nont during purge Number of Casing Volumes removed Purge Rate (gallons/minute) ~3 Analyses Requested Time Collected Containers & Preservation COMMENTS/ Field I.D. 8260 2-40 ML VOA 15:04 SAMPLES: MN-1 CAM-17 1-,54 cr VI. SPECIFIC CONDUCTIVITY READINGS WIR IED GREATLY AND WERE NOT REPRODUCEABLE. THEREFORE THESE READINGS MAL RE ERRONEOUS.

PROJECT NAME: WELL DATE: 6-5-0/ PERSONNEL: BLIGGETT PROJECT NUMBER: 49 1103 .01 WELL NUMBER: MW-2 WELL VOLUME CALCULATION: Depth of Depth to Water Multiplier Casing Vol Well (R.) Water (ft.) Column (ft.) (below) (ġallons) 44.50 70.20-= 16.4 = 25.7*.64 Mult, for casing diam. = 2-in,=0,16; 4-in,=0.64; 5-in,=1.02; 6-in,=1.44 gals/ft, INSTRUMENT CALIBRATION No. of bailers prior to start of purge: 🎣 , Field Standard Instrument measure measure PURGE METHOD: GROAND FUMP Conductivity PURGE DEPTH: 65. рΗ SEE MW-4 ρН END TIME: 1:01 PM START TIME: Turbidity 11:50. Temperature 13:01 TOTAL GALLONS PURGED: 55 Depth Probe Time 12 00 12 29 12 41 12:49 128 13:00 Volume Purged (gallons) 30 40 50. 10 20 54 Temperature (degrees F or C) 83.9 82.0. 82.5 82.0 ez.2 pH (units) フ・マフ 7.50 7.73 7.56 7.62 Specific Conductivity (uS/cm) 2100 2070 1920 1850 2010 Turbidity/Color (NTU) 71.6 353 34.6 145 4.43 17.2 Odor Depth to Water (ft below TOC) MUNE during purge Number of Casing Volumes removed Purge Rate (gallons/minute) 1.0 Analyses Requested Containers & Preservation COMMENTS/ Field I.D. Time Collected 13:05 8260 2-40 ML UDA SAMPLES: MW-Z. 1-.54 CAM-17 Cr VI.

PROJECT NAME: WELL DATE: 6-5-0/ PROJECT NUMBER: 49 1103.01 WELL NUMBER: MW-3 PERSONNEL: BLIGGETT WELL VOLUME CALCULATION: Depth of Depth to Water Multiplier Casing Vol. Well (ft.) Water (fL) Column (ft.) (below) (gallons) =16.4 = 69 25.58 .64 4.74 70.32 Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. INSTRUMENT CALIBRATION No. of bailers prior to start of purge; 🎣 Field Standard Instrument measure measure PURGE METHOD: ground pump. Conductivity PURGE DEPTH: 65 ρН SEE MW-4 рΗ END TIME: 11:04 START TIME: 10:42 Turbidity Temperature TOTAL GALLONS PURGED: 55 Depth Probe Time 10:48 10:55 1001 11:04 10:45 10:52 11:03 Volume Purged (gallons) 30 40 10 20 50 55 5**E** Temperature (degrees F or C) 72.8 71.0 71.4 10.2 70.7 69.8 pH (units) 7.28 7.27 7.33 7.56 フ・ヨブ 7.74 Specific Conductivity (uS/cm) 960 1180 1440 1440 1500 1530 Turbidity/Color (NTU) 115 88.4 39.2 7.22 484 8.60 Odor Depth to Water (ft below TOC) NONE during purge Number of Casing Volumes removed Purge Rate (gallons/minute) 3.1 COMMENTS/ Containers & Preservation Analyses Requested Field I.D. Time Collected SAMPLES: 11:17 2-40 ML VOA MW-3 8260 1.56 CAM-17 Cr VI.

PROJECT NUMBER: 49 1103.0 WELL VOLUME CALCULATION:	,								
WELL VOLUME CALCULATION:	<u> </u>	WELL N	IUMBER:	MW	1-4	. Р	ERSONNE	EL: BLIG	GE++
Depth of Depth to			Water			Multiplie			Casing Vo
Well (ft.) Water (ft.)	- 00		Column (f			(below)		_	gallons
69.40 - 4.4-in.=0.16; 4-in.=0.64	15.80 1; 5-in.=1.02;	= 6-in.=1.44 g		.6	*	.64	= [5.1 × 3. =	(45)
					INST	RUMEN	T CALIBRA	ATION	
No. of bailers prior to start of purge:							Fie		Standard
PURGE METHOD: OROYMO FOS		•			Instrum	nent	me	asure	measure
<i>J</i> • • •					Conduc	ctivity	1000		1000
PURGE DEPTH: 65. 1					рН		4.00		4.01
					рН		7.00		7.00
START TIME: 9:30	ENID TIA	1E: 9:4	La ·		Turbidit	h.	1.00		
START TIME. 9,30	CND HIN	ne. 7 m	9		l	_		TU	.87
TOTAL GALLONS PURGED: 50					Temper Depth F		72.7		
ime	9:37	9.40	9:44	9	: 47				
olume Purged (gallons)	18	26	40	3	,0				
emperature (degrees F or C)	71.4	71.2	71.0	71	· (
H (units)	6.78	6.93	6.94	7.	01				
pecific Conductivity (uS/cm)	2540	2600	2610	2	,620				
urbidity/Color (NTU)	11.5	2.34	0.43	0.	21				
Odor	none								
epth to Water (ft below TOC)									
uring purge	l								
lumber of Casing olumes removed									
urge Rate (gallons/minute)	2.9								
OMMENTS/ Field I.D.	Time Collecte	ed .	Containers	& Pre	servatio	<u>in</u>	Analyses F	Requested	
AMPLES: MW-4	9:55		2 40	mι	VOA	ŀ	72 <i>60</i>	(00c)	
•			1 ,5	2			Cr VI	(10c) CAM-17	
					·				
									j

									
PROJECT NAME: WELL						D	ATE: 6-3	5-01	
PROJECT NUMBER: 49 1103.	01	WELL I	NUMBER:	MW	1-5	Pf	ERSONNE	L:BLIG	GEHT
WELL VOLUME CALCULATION:									
Depth of Depth to			Water			Multiplier			Casing \
Well (ft.) Water (ft.)		Column (ft.)		(below)			(gallo
69.10 - 46.30		=	22.	8	*	.64	= 14	A >34	427
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.	64; 5-in.=1.02;	; 6-in.=1.44 ç	gals/ft.					_ (73.1
					INST	RUMENT	CALIBRA	TION	
No. of bailers prior to start of purge	· m.La						Field		Standa
110. 01 241010 p.101 10 21411 21 p.1.32	ידרייע					. &	4		
					Instrun	nent	mea	sure	measi
PURGE METHOD: GROWNO PA	m.P								
					Condu	ctivity			
PURGE DEPTH: 65					рН				•
		_			рН	/	JEE M	,_4//	
CTADT TIME:	END TIL	ME: /3:	アフ		Turbidit				
START TIME: 13:39	LND III	ME. 15 .	5 /		ļ	-	•		
					Temper	rature			
TOTAL GALLONS PURGED: 54					Depth F	Probe			
Time	1.115			Τ,_		1.2.56			
1	13.43	13:46	13:50	13	355	13:56	'		
Volume Purged (gallons)	10	20	30] _	40	F-0			T
	10	w	00		40	50	ļ		<u> </u>
Temperature (degrees F or C)	123 A	78.4	٠, ,,	1-,	· ^	71. 0			1
	100.01		76.6	16	5.0	76.9			ļ
pH (units)	772	002	2.69	C.	72	9.05			
Specific Conductivity (uS/cm)	1, 1	0.00	0.0,	-				ļ	
Specific Conductivity (dozen)	2.750	2700	2790	77	20	2840			
Turbidity/Color (NTU)	10100		27,70			20 /-			
i	19.5	9.29	3.53	1,1	98	1.29			
Odor		/		 	10	•			
									ŀ
Depth to Water (ft below TOC)	mone								ļ
during purge	I ALLINC								
Number of Casing	1								
Volumes removed				 					
Purge Rate (gallons/minute)						>			
	~2								<u> </u>
COMMENTS/ Field I.D.	Time Collecte	<u>d</u>	Containers (& Pres	servation	1	Analyses Re	quested	
SAMPLES: MW-5	14:07	7	9 - 40	ML	vot	.	€260	,	
ęrą -	14 0	<u>-</u>				•	CAM-		
			七一 ·	5 L	,	•			
							Cr VI	•	
ASS. T NED									
Min-5 DLIP	4 02	2-	-40 ML	10	<i>A</i> .	ć	8260 1411-17		
		1 -	-0.56	CCP	TI.11	ER (ANI-17		
						C	r VI.		

APPENDIX B

Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling

<u>LABORATORY REPORT FORM</u>

RECEIVED

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

JUN 28 2001

Address:

3002 Dow Suite 532 Tustin, CA 92780

ERLER & KALINOWSKI, INC. SANTA MONICA OFFICE

Telephone:

(714) 832-0064

Laboratory Certification

(ELAP) No.:

<u>1416</u>

Expiration Date:

2003

Laboratory Director's Name (Print):

Mark Noorani

Client:

Erler & Kalinowski, Inc.

Project No.:

991103.01

Project Name:

Webb

Laboratory Reference: EKI 12561

Analytical Method: EPA 8260, Cam Metals

Date Sampled:

06/05/01

Date Received:

06/05/01

Date Reported:

06/19/01

Sample Matrix:

Water

Chain of Custody Received:

Laboratory Director's Signature:

Erler & Kalinowski, Inc. Client Project ID: Webb ATTN: Mr. Brian Auchard **Client Project #: 991103.01** 3250 Ocean Park Blvd. Suite 385 Santa Monica, CA 90405 Sampled: 06/05/01 06/05/01 Received: ---06/05/01 06/05/01 SAMPLE DESCRIPTION (Water) Analyzed: 06/12/01 06/12/01 06/12/01 Laboratory Reference #: EKI 12561 Reported: 06/19/01 06/19/01 06/19/01 Lab Sample I.D. MB0612 01060123 01060124 VOLATILE ORGANICS BY GC/MS (EPA 8260) Client Sample I.D. MW-1 MW-2 **DILUTION FACTOR** 1 250 20

		DILUTION	PACIUR	ł	230	20	20
ANALYTE	CAS	DETECTION	MDL		SAMPLE	RESULTS	
	NUMBER	LIMIT					
		μg/l		μg/l	μg/l	μg/l	μg/l
Acetone	67-64-1	2.0	2.0	<2.0	<500	<40	<40
Benzene	71-43-2	0.5	0.5	<0.5	<125	<10	<10
Bromodichloromethane	75-27-4	0.5	0.5	<0.5	<125	<10	<10
Bromoform	75-25-2	0.5	0.5	<0.5	<125	<10	<10
Bromomethane	74-83-9	1.0	1.0	<1.0	<250	<20	<20
2-Butanone	78-93-3	1.0	1.0	<1.0	<250	<20	<20
Carbon Disulfide	75-15-0	0.5	0.5	<0.5	<125	<10	<10
Carbon tetrachloride	56-23-5	0.5	0.5	<0.5	<125	<10	<10
Chlorobenzene	108-90-7	0.5	0.5	<0.5	<125	<10	<10
Chlorodibromomethane	124-48-1	0.5	0.5	<0.5	<125	<10	<10
Chloroethane	75-00-3	0.5	0.5	<0.5	<125	<10	<10
2-Chloroethyl vinyl ether	110-75-8	1.0	1.0	<1.0	<250	<20	<20
Chloroform	67-66-3	0.5	0.5	<0.5	<125	<10	<10
Chloromethane	74-87-3	0.5	0.5	<0.5	<125	<10	<10
1,1-Dichloroethane	75-34-3	0.5	0.5	<0.5	<125	<10	<10
1,2-Dichloroethane	107-06-2	0.5	0.5	<0.5	<125	<10	<10
1,1-Dichloroethene	75-35-4	0.5	0.5	<0.5	<125	<10	<10
cis-1,2-Dichloroethene	156-59-2	0.5	0.5	<0.5	<125	47	210
trans-1,2-Dichloroethene	156-60-5	0.5	0.5	<0.5	<125	<10	<10
1,2-Dichloropropane	78-87-5	0.5	0.5	<0.5	<125	<10	<10
cis-1,3-Dichloropropene	10061-01-5	0.5	0.5	<0.5	<125	<10	<10
trans-1,3-Dichloropropene	10061-02-6	0.5	0.5	<0.5	<125	<10	<10
Ethylbenzene	100-41-4	0.5	0.5	<0.5	<125	<10	<10
2-Hexanone	591-78-6	1.0	1.0	<1.0	<250	<20	<20
Methylene chloride	75-09-2	2.5	2.5	<2.5	<625	<50	<50
4-Methyl-2-pentanone	108-10-1	1.0	1.0	<1.0	<250	<20	<20
Styrene	100-42-5	0.5	0.5	<0.5	<125	<10	<10
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.5	<0.5	<125	<10	<10
Tetrachloroethene	127-18-4	0.5	0.5	<0.5	150	<10	<10
Toluene	108-88-3	0.5	0.5	<0.5	<125	<10	<10
1,1,1-Trichloroethane	71-55-6	0.5	0.5	<0.5	<125	<10	<10
1,1,2-Trichloroethane	79-00-5	0.5	0.5	<0.5	<125	<10	<10
Trichloroethene	79-01-6	0.5	0.5	<0.5	31,000	2,300	2,300
Trichlorofluoromethane	75-69-4	0.5	0.5	<0.5	<125	<10	<10
MTBE	1634-04-4	1.0	1.0	<1.0	<250	<20	<20
Vinyl chloride	75-01-4	0.5	0.5	<0.5	<125	<10	<10
Total Xylenes	1330-20-7	0.5	0.5	<0.5	<125	<10	<10
	SU	RROGATE RECO					
		Dibromofluoro	methane	96	111	113	114
		Toluene-d8	_	108	109	112	109
			-				

4-Bromofluorobenzene 92 90 92 91 <u>س.م.</u> INT Orange Coast Analytical, Inc.

06/05/01

06/05/01

06/12/01

06/19/01

01060125

MW-3

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Erler & Kalinowski, Inc. ATTN: Mr. Brian Auchard 3250 Ocean Park Blvd. Suit	te 385			Project ID: t Project #:	Webb 991103.01		
Santa Monica, CA 90405			Sampled:	06/05/01	06/05/01	06/05/01	06/05/01
		1	Received:	06/05/01	06/05/01	06/05/01	06/05/01
SAMPLE DESCRIPTION (Nater)		Analyzed:	06/09/01	06/12/01	06/12/01	06/09/01
Laboratory Reference #:	EKI 12561		Reported:	06/19/01	06/19/01	06/19/01	06/19/01
•			ample I.D.	01060126	01060127	01060128	01060129
VOLATILE ORGANICS BY	GC/MS (EPA			MW-4	MW-5	MW-5 DUP	Rinsate Blank
	•	DILUTION		1	50	50	1
ANALYTE	CAS	DETECTION	MDL	•		RESULTS	•
	NUMBER	LIMIT			O,, 22	NEGOE 10	
		μg/l		μg/l	μg/l	μg/l	μg/l
Acetone	67-64-1	2.0	2.0	<2.0	<100	<100	بروم <2.0
Benzene	71-43-2	0.5	0.5	<0.5	<25	<25	<0.5
Bromodichloromethane	75-27-4	0.5	0.5	<0.5	<25	<25	<0.5 <0.5
Bromoform	75-25-2	0.5	0.5	<0.5	<25	<25	5.8
Bromomethane	74-83-9	1.0	1.0	<1.0	<50	< 5 0	3.8 <1.0
2-Butanone	78-93-3	1.0	1.0	<1.0	<50	<50 <50	<1.0 <1.0
Carbon Disulfide	75-15-0	0.5	0.5	<0.5	<25	<25	<0.5
Carbon tetrachloride	56-23-5	0.5	0.5	<0.5	<25	<25	
Chlorobenzene	108-90-7	0.5	0.5	<0.5 <0.5	<25 <25	<25 <25	<0.5
Chlorodibromomethane	124-48-1	0.5	0.5	<0.5 <0.5	<25	<25 <25	<0.5
Chloroethane	75-00-3	0.5	0.5	<0.5 <0.5	<25	<25 <25	1.1 <0.5
2-Chloroethyl vinyl ether	110-75-8	1.0	1.0	<0.5 <1.0	<50	<25 <50	
Chloroform	67-66-3	0.5	0.5	<0.5	<25		<1.0
Chloromethane	74-87-3	0.5	0.5	<0.5 <0.5		<25	< 0.5
1,1-Dichloroethane	7 4- 07-3 75-34-3	0.5	0.5 0.5	<0.5 <0.5	<25	<25	< 0.5
1,2-Dichloroethane	107-06-2	0.5	0.5	<0.5 <0.5	<25	<25 <25	< 0.5
1,1-Dichloroethene	75-35-4	0.5	0.5 0.5	<0.5 <0.5	<25	<25	< 0.5
cis-1,2-Dichloroethene	156-59-2	0.5	0.5 0.5		<25	<25	<0.5
trans-1,2-Dichloroethene	156-59-2 156-60-5	0.5	0.5 0.5	<0.5 <0.5	340	350	<0.5
1,2-Dichloropropane	78-87 - 5	0.5	0.5 0.5		<25	<25	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5		<0.5	<25 <25	<25	< 0.5
trans-1,3-Dichloropropene	10061-01-5	0.5	0.5 0.5	< 0.5	<25	<25	<0.5
	10001-02-0			< 0.5	<25	<25 -25	<0.5
Ethylbenzene 2-Hexanone	591-78-6	0.5 1.0	0.5	<0.5	<25	<25	<0.5
Methylene chloride	75-09-2		1.0	<1.0	<50	<50 -105	<1.0
4-Methyl-2-pentanone	108-10-1	2.5	2.5	<2.5	<125	<125	<2.5
• •		1.0	1.0	<1.0	<50 -05	<50 -25	<1.0
Styrene 1,1,2,2-Tetrachloroethane	100-42-5 79-34-5	0.5	0.5	< 0.5	<25 +25	<25 -25	<0.5
		0.5	0.5	< 0.5	<25	<25 -25	<0.5
Tetrachloroethene	127-18-4	0.5	0.5	<0.5	<25	<25	<0.5
Toluene	108-88-3 71-55-6	0.5	0.5	< 0.5	<25	<25	<0.5
1,1,1-Trichloroethane		0.5	0.5	< 0.5	<25	<25 	<0.5
1,1,2-Trichloroethane Trichloroethene	79-00-5 79-01-6	0.5	0.5	< 0.5	<25	<25	<0.5
Trichlorofluoromethane	79-01-6 75-69-4	0.5 0.5	0.5	<0.5	5,400	5,400	<0.5
MTBE	1634-04-4	0.5 1.0	0.5 1.0	<0.5	<25	<25	<0.5
Vinyl chloride	75-01-4	0.5	0.5	<1.0 <0.5	<50	<50	3.4
Total Xylenes	1330-20-7	0.5	0.5	<0.5 <0.5	<25	<25	<0.5
Total Aylenes		RROGATE REC		~0.5	<25	<25	<0.5
	SUF	Dibromofluord		114	107	108	110
		Toluene-d8	,,,,eulalie	108	111	110	116 106
		4-Bromofluoro	henzene	89	90	92	89
INT_min						Coast Analyti	

Erler & Kalinowski, Inc.			Client	Droiget ID:	\A/akk
ATTN: Mr. Brian Auchard				Project ID:	Webb
3250 Ocean Park Blvd. Suit	te 385		Cilen	t Project #:	991103.01
Santa Monica, CA 90405	le 303		Compled		00/05/04
Gainta Mornica, CA 90409			Sampled:		06/05/01
SAMPLE DESCRIPTION (Nator)		Received:	00/42/04	06/05/01
Laboratory Reference #:	•		Analyzed:	06/13/01	06/13/01
Laboratory Reference #.	LN 12501		Reported: ample I.D.	06/19/01	06/19/01
VOLATILE ORGANICS BY	V GC/MS (EDA		ample I.D.	MB0613	01060302
VOLATILL ONGANIOS B	COMO (LFA	•	AITIPIE I.D. I FACTOR	 1	Rinsate Water
ANALYTE	CAS	DETECTION	MDL		1 E DECULTO
AMETIE	NUMBER	LIMIT	WIDL	SAMPLE	E RESULTS
	WOMBER	μg/l		ua/l	//
Acetone	67-64-1	μ σ // 2.0	2.0	μ g/l <2.0	μg/l <2.0
Benzene	71-43-2	0.5	0.5	<0.5	<0.5
Bromodichloromethane	75-27-4	0.5	0.5	<0.5 <0.5	
Bromoform	75-27- 4 75-25-2	0.5	0.5 0.5	<0.5 <0.5	<0.5 6.7
Bromomethane	74-83-9	1.0	1.0	<0.5 <1.0	
2-Butanone	78-93-3	1.0	1.0	<1.0 <1.0	<1.0
Carbon Disulfide	75-15-0	0.5	0.5	<0.5	<1.0
Carbon tetrachloride	56-23-5	0.5	0.5 0.5		<0.5
Chlorobenzene	108-90-7	•		<0.5	<0.5
Chlorodibromomethane	124-48-1	0.5	0.5	<0.5	<0.5
Chloroethane		0.5	0.5	<0.5	1.6
	75-00-3	0.5	0.5	<0.5	<0.5
2-Chloroethyl vinyl ether Chloroform	110-75-8	1.0	1.0	<1.0	<1.0
	67-66-3	0.5	0.5	<0.5	<0.5
Chloromethane	74-87-3	0.5	0.5	<0.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	0.5	<0.5	<0.5
1,2-Dichloroethane	107-06-2	0.5	0.5	<0.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	0.5	<0.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	0.5	< 0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	0.5	<0.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	0.5	< 0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	0.5	< 0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	0.5	<0.5	<0.5
2-Hexanone	591-78-6	1.0	1.0	<1.0	<1.0
Methylene chloride	75-09-2	2.5	2.5	<2.5	<2.5
4-Methyl-2-pentanone	108-10-1	1.0	1.0	<1.0	<1.0
Styrene	100-42-5	0.5	0.5	< 0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.5	< 0.5	<0.5
Tetrachloroethene	127-18-4	0.5	0.5	<0.5	<0.5
Toluene	108-88-3	0.5	0.5	< 0.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	0.5	< 0.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	0.5	< 0.5	<0.5
Trichloroethene	79-01-6	0.5	0.5	< 0.5	<0.5
Trichlorofluoromethane	75-69-4	0.5	0.5	< 0.5	<0.5
MTBE	1634-04-4	1.0	1.0	<1.0	4.5
Vinyl chloride Total Xylenes	75-01-4 1330-20-7	0.5 0.5	0.5 0.5	<0.5	<0.5
TOTAL ASIGNES		U.S RROGATE REC	0.5	<0.5	<0.5
	30	Dibromofluor		99	100
		Toluene-d8	Jinetialle	99 107	109
		4-Bromofluore	henzene	89	90
INT www.		- Diomonaut			Orange Coast Analytical, Inc.
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Erler & Kalinowski, Inc.

ATTN: Mr. Brian Auchard

3250 Ocean Park Blvd. Suite 385

Santa Monica, CA 90405

Client Project ID: Webb Client Project #: 991103.01

SAMPLE DESCRIPTION (Water)	Sampled: Received:		06/05/01 06/05/01	06/05/01 06/05/01	06/05/01 06/05/01
Laboratory Reference #: EKI 12561	Reported:	06/19/01	06/19/01	06/19/01	06/19/01

Lab Sample I.D. MB 01060123 01060124 01060125 Client Sample I.D. MW-1 MW-2 MW-3

CCR METALS							
ANALYTE	DATE	EPA	DETECTION		SAMPLE	RESULTS	
	TESTED	METHOD	LIMIT				
			mg/I	mg/I	mg/l	mg/l	mg/l
Antimony	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/07/01	206.2	0.001	<0.001	0.32	0.039	0.11
Barium	06/06/01	200.7	0.01	<0.01	0.25	0.090	0.32
Beryllium	06/06/01	200.7	0.01	<0.01	<0.01	< 0.01	<0.01
Cadmium	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/06/01	218.4	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Total)	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	06/06/01	200.7	0.01	<0.01	<0.01	< 0.01	<0.01
Copper	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/06/01	200.7	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/06/01	245.1	0.001	< 0.001	<0.001	<0.001	< 0.001
Molybdenum	06/06/01	200.7	0.05	< 0.05	0.45	0.95	0.79
Nickel	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	06/06/01	200.7	0.01	<0.01	0.024	0.016	0.023

Erler & Kalinowski, Inc.

ATTN: Mr. Brian Auchard

3250 Ocean Park Blvd. Suite 385

Santa Monica, CA 90405

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: EKI 12561

Client Project ID: Webb Client Project #: 991103.01

Sampled: 06/05/01 06/05/01 06/05/01

Received: 06/05/01 06/05/01 06/05/01 06/05/01 **Reported:** 06/19/01 06/19/01 06/19/01 06/19/01

Lab Sample I.D. 01060126 01060127 01060128 01060129 Client Sample I.D. MW-4 MW-5 MW-5 DUP Rinsate Blank

CCR METALS							
ANALYTE	DATE	EPA	DETECTION		SAMPL	E RESULTS	
	TESTED	METHOD	LIMIT				
			mg/l	mg/l	mg/l	mg/l	mg/l
Antimony	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/07/01	206.2	0.001	0.027	0.15	0.19	0.0011
Barium	06/06/01	200.7	0.01	0.030	0.16	0.31	0.075
Beryllium	06/06/01	200.7	0.01	<0.01	<0.01	< 0.01	<0.01
Cadmium	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/06/01	218.4	0.01	<0.01	<0.01	< 0.01	<0.01
Chromium (Total)	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Copper	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/06/01	200.7	0.05	<0.05	<0.05	< 0.05	< 0.05
Mercury	06/06/01	245.1	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	06/06/01	200.7	0.05	<0.05	1.1	0.92	<0.05
Nickel	06/06/01	200.7	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/06/01	200.7	0.01	< 0.01	<0.01	<0.01	<0.01
Thallium	06/06/01	200.7	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/06/01	200.7	0.01	<0.01	<0.01	< 0.01	<0.01
Zinc	06/06/01	200.7	0.01	0.020	0.011	0.017	0.038

06/05/01

Erler & Kalinowski, Inc.

ATTN: Mr. Brian Auchard

3250 Ocean Park Blvd. Suite 385

Santa Monica, CA 90405

SAMPLE DESCRIPTION (Water)

SAMPLE DESCRIPTION (Water)

Received: --Reported: 06/19/01

Laboratory Reference #: EKI 12561

Lab Sample I.D. MB 01060302
Client Sample I.D. --- Rinsate

Client Project ID: Webb

Client Project #: 991103.01

06/05/01

06/05/01

06/19/01

			Chefft Sample I.D.		Rinsate
					Water
CCR METALS					
ANALYTE	DATE	EPA	DETECTION	SAMPLE	RESULTS
	TESTED	METHOD	LIMIT		
			mg/l	mg/l	mg/l
			mg/r	mg/r	mg/r
Antimony	06/14/01	200.7	0.1	<0.1	<0.1
Arsenic	06/13/01	206.2	0.001	< 0.001	0.0022
Barium	06/14/01	200.7	0.01	<0.01	0.099
Beryllium	06/14/01	200.7	0.01	< 0.01	<0.01
Cadmium	06/14/01	200.7	0.01	<0.01	<0.01
Chromium (Total)	06/14/01	200.7	0.01	<0.01	<0.01
Cobalt	06/14/01	200.7	0.01	<0.01	< 0.01
Copper	06/14/01	200.7	0.01	<0.01	<0.01
Lead	06/14/01	200.7	0.05	<0.05	<0.05
Mercury	06/13/01	245.1	0.001	<0.001	<0.001
Molybdenum	06/14/01	200.7	0.05	<0.05	<0.05
Nickel	06/14/01	200.7	0.01	<0.01	<0.01
Selenium	06/14/01	200.7	0.1	<0.1	<0.1
Silver	06/14/01	200.7	0.01	<0.01	<0.01
Thallium	06/14/01	200.7	0.1	<0.1	<0.1
Vanadium	06/14/01	200.7	0.01	<0.01	<0.01
Zinc	06/14/01	200.7	0.01	<0.01	0.056

8260 QA / QC REPORT Reporting Unit: μg/I

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date Performed: 06/12/01 LAB Sample I.D.: 01060172 Laboratory Reference: EKI 12561

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1,1-Dichloroethene	0.0	20	18	17	90	85	6	61-145	14
Benzene	2.4	20	20	22	88	98	10	76-127	11
Trichloroethene	0.0	20	16	17	80	85	6	71-120	14
Toluene	0.5	20	19	20	92.5	97.5	5	76-125	13
Chlorobenzene	0.0	20	17	18	85	90	6	75-130	13

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration (≤5 X PQL);

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS: {(MS-R1)/SP} X 100. %MSD = Percent Recovery of MSD: {(MSD-R1)/SP} X 100.

RPD = Relative Percent Difference: {(MS - MSD)/(MS + MSD)} X 100 X 2

ACP%MS(MSD) = Acceptable Range of Percent. ACP RPD = Acceptable Relative Percent Difference

2. Laboratory Quality Control check sample

Date Performed: 06/12/01

LAB Sample 1. D.: 8773,74,75,76,77,72

	311 1001	200 C 200 (
trans-1,2-Dichloroethene	50	57	114	80 -120
1,1,1-Trichloroethane	50	57	114	80 -120
1,2-Dichloroethane	50	54	108	80 -120
Tetrachloroethene	50	54	108	80 -120
Styrene	50	59	118	80 -120

ANALYST: NAHID AMERI

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Orange Coast Analytical, Inc.

QA / QC REPORT Reporting Unit: mg/l

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

LAB Sample I.D.: '01060302, OCA100 Laboratory Reference: EKI 12561

Analyte	DATE ANALYZED	R1	SP	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD
Antimony	06/14/01	0.0	1.0	1.08	1.12	108	112	4	80-120	15
Arsenic	06/13/01	0.0	0.005	0.00518	0.00449	104	90	14	80-120	15
Barium	06/14/01	0.099	0.10	0.197	0.196	98	97	1	80-120	15
Beryllium	06/14/01	0.0	0.10	0.102	0.101	102	101	1	80-120	15
Cadmium	06/14/01	0.0	0.10	0.102	0.101	102	101	1	80-120	15
Chromium	06/14/01	0.0	0.10	0.0946	0.0947	95	95	0	80-120	15
Cobalt	06/14/01	0.0	0.10	0.0929	0.0928	93	93	0	80-120	15
Copper	06/14/01	0.0	0.10	0.0983	0.0992	98	99	1	80-120	15
Lead	06/14/01	0.0	1.0	0.990	0.992	99	99	0	80-120	15
Mercury	06/13/01	0.0	0.010	0.00884	0.00904	88	90 '	2	80-120	15
Molybdenum	06/14/01	0.0	1.0	1.08	1.10	108	110	2	80-119	15
Nickel	06/14/01	0.0	0.50	0.447	0.448	89	90	0	80-120	15
Selenium	06/14/01	0.0	1.0	1.00	1.01	100	101	1	80-120	15
Silver	06/14/01	0.0	1.0	0.892	0.906	89	91	2	80-120	15
Thallium	06/14/01	0.0	1.0	0.988	0.993	99	99	1	80-120	15
Vanadium	06/14/01	0.0	0.50	0.517	0.516	103	103	0	80-120	15
Zinc	06/14/01	0.056	0.10	0.165	0.166	109	110	1	80-120	15

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration (<5 X PQL)

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS: {(MS-R1)/SP} X 100.

%MSD = Percent Recovery of MSD: {(MSD-R1)/SP} X 100.

RPD = Relative Percent Difference: {(MS - MSD)/(MS + MSD)} X 100 X 2

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

ANALYST:	Chris Tisserat	

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2. Laboratory Quality Control check sample

LAB Sample 1.D.: OCA8490, OCA8718, OCA8610

ANALYTE	Date Analyzed	SPK CONC	RESULTS	%REGOVERY	ACP%
Antimony	06/14/01	0.50	0.48	96	90 - 110
Arsenic	06/13/01	0.0050	0.0051	102	90 - 110
Barium	06/14/01	0.50	0.49	98	90 - 110
Beryllium	06/14/01	0.50	0.49	98	90 - 110
Cadmium	06/14/01	0.50	0.49	98	90 - 110
Chromium	06/14/01	0.50	0.48	96	90 - 110
Cobalt	06/14/01	0.50	0.48	96	90 - 110
Copper	06/14/01	0.50	0.47	94	90 - 110
Lead	06/14/01	0.50	0.49	98	90 - 110
Mercury	06/13/01	0.0050	0.0046	92	90 - 110
Molybdenum	06/14/01	0.50	0.48	96	90 - 110
Nickel	06/14/01	0.50	0.46	92	90 - 110
Selenium	06/14/01	0.50	0.48	96	90 - 110
Silver	06/14/01	0.50	0.49	98	90 - 110
Thallium	06/14/01	0.50	0.49	98	90 - 110
Vanadium	06/14/01	0.50	0.49	98	90 - 110
Zinc	06/14/01	0.50	0.49	98	90 - 110

ANALYST:	Chris Tisserat	DATE:	06/19/01	

QA / QC REPORT Reporting Unit: mg/l

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

LAB Sample I . D . : 01060129, OCA100 Laboratory Reference: EKI 12561

Analyte	DATE	R1	SP	MS	MSD	%MS	%MSD	RPD	ACP	ACP
	ANALYZED								%MS	RPD
		<u> </u>								
Antimony	06/06/01	0.0	1.0	1.16	1.17	116	117	1	80-120	15
Arsenic	06/07/01	0.0	0.020	0.0192	0.0215	96	108	11	80-120	15
Barium	06/06/01	0.075	0.10	0.180	0.182	105	107	1	80-120	15
Beryllium	06/06/01	0.0	0.10	0.106	0.107	106	107	1	80-120	15
Cadmium	06/06/01	0.0	0.10	0.108	0.109	108	109	1	80-120	15
Chromium	06/06/01	0.0	0.10	0.0994	0.101	99	101	2	80-120	15
Chromium VI	06/06/01	0.0	0.10	0.0952	0.0988	95	99	4	80-120	15
Cobalt	06/06/01	0.0	0.10	0.0967	0.0969	97	97	0	80-120	15
Copper	06/06/01	,0.0	0.10	0.0944	0.0960	94	96	2	80-120	15
Lead	06/06/01	0.0	1.0	1.10	1.14	110	114	4	80-120	15
Mercury	06/06/01	0.0	0.010	0.00899	0.00906	90	91	_1	80-120	15
Molybdenum	06/06/01	0.038	1.0	1.20	1.23	116	119	2	80-119	15
Nickel	06/06/01	0.0	0.50	0.489	0.493	98	99	1	80-120	15
Selenium	06/06/01	0.0	1.0	1.12	1.11	112	111	1	80-120	15
Silver	06/06/01	0.0	1.0	0.939	0.962	94	96	2	80-120	15
Thallium	06/06/01	0.0	1.0	1.12	1.11	112	111	1	80-120	15
Vanadium	06/06/01	0.0	0.50	0.536	0.544	107	109	1	80-120	15
Zinc	06/06/01	0.038	0.10	0.146	0.146	108	108	0	80-120	15

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration (<5 X PQL)

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS: {(MS-R1)/SP} X 100. %MSD = Percent Recovery of MSD: {(MSD-R1)/SP} X 100.

RPD = Relative Percent Difference: {(MS - MSD)/(MS + MSD)} X 100 X 2

ACP%MS(MSD) = Acceptable Range of Percent. ACP RPD = Acceptable Relative Percent Difference

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Orange Coast Analytical, Inc.

2. Laboratory Quality Control check sample

LAB Sample I.D.: OCA8490, OCA8718, OCA8610, OCA8806

ANALYTE	Date Analyzed	SPK COND	RESULTS	ARECOVERY	ACP%
Antimony	06/06/01	0.50	0.50	100	90 - 110
Arsenic	06/07/01	0.020	0.018	90	90 - 110
Barium	06/06/01	0.50	0.52	104	90 - 110
Beryllium	06/06/01	0.50	0.52	104	90 - 110
Cadmium	06/06/01	0.50	0.52	104	90 - 110
Chromium	06/06/01	0.50	0.52	104	90 - 110
Chromium VI	06/06/01	0.35	0.34	97	90 - 110
Cobalt	06/06/01	0.50	0.51	102	90 - 110
Copper	06/06/01	0.50	0.51	102	90 - 110
Lead	06/06/01	0.50	0.50	100	90 - 110
Mercury	06/06/01	0.0050	0.0050	100	90 - 110
Molybdenum	06/06/01	0.50	0.53	106	90 - 110
Nickel	06/06/01	0.50	0.49	98	90 - 110
Selenium	06/06/01	0.50	0.51	102	90 - 110
Silver	06/06/01	0.50	0.51	102	90 - 110
Thallium	06/06/01	0.50	0.52	104	90 - 110
Vanadium	06/06/01	0.50	0.51	102	90 - 110
Zinc	06/06/01	0.50	0.49	98	90 - 110

ANALYST:	Chris Tisserat	DATE:	06/12/01

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ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532 Tustin, CA 92780 (714) 832-0064, Fax (714) 832-0067 4620 E. Elwood, Suite 4 Phoenix, AZ 85040

(602) 736-0960 Fax (602) 736-0970

REQUIRED TAT:

Lab Job No:	-	
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CUSTOMER INFORMATION		PROJECT INFORMATION						REOUS WETHON	3		' /				
COMPANY: FRIER & KALINOWSKI, INC.	PROJ	PROJECT NAME: WELD							× /			/ ,	/ 51	/ / / /	
SEND REPORT TO: BRIAN HUCHARD	NUM	NUMBER: 99/103.01							•	/ /	/./		187		
ADDRESS: 3250 OCHN PARK BLUD							3	7 W	/ /	 		1	Ý,	/ / /	
Suitz 325	ADDF	ESS: 5030	FIRES	tone	BLUD		_ ~			/ 29	7 /	\mathcal{N}			
PHONE: 310. 314. 2835 FAX: 310. 314. 288	So	OUTH GAT	E,CA						/ /		/.		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	/ /	
PHONE: 310 314 8855 FAX: 310 314 886	SAME	LED'BY: VBL	<u> </u>				1/	N/	14	t/ /		<i>'</i> /	\mathscr{A}		
SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE Matrix	CONTAINER TYPE	PRES.	/9	b/	<u>/ </u>		Z	_	_	REMARKS/PRECAUTIONS	
MWI	2	6-5-01	15:04	W_	40 mc	HCL	X				_	ļ	<u></u>	2 WEEK TURNAROUND	
MW-!	1		15:04		56	HN03			X_{\perp}	\nearrow	igwedge	ļ			
MW-2	2.		13:05		40 ML	HC L	X				<u> </u>	ļ			
MW-2	1		13:05		.56	HNO3			X_{\perp}	>	igspace				
MW-3	2	ļ	11.17		40 ML	HCL	X								
MW-3	1		11:17		.54	HNO3]	X.					777	
MW-4	2		9:55		40 mL	HCL	X								
MN-4	1		9:55		.5 L	HNO3			X_{\perp}						
MW-5	2		15:02		40 ML	HCL	X						<u> </u>		
MW-5	1		15.02		.5 4	HNO.3			X.					1117-1100-1101	
MW-5 DUP	2		15:02		40 mc	HCC	X								
MW-5DUP	1		15:02		.52	HNU3			X_{\perp}				,		
RITUSATE DAWK	2		14:24		40mc	HCL	X				J		<u> </u>		
RINSATE Blowk	1		14.24		.5L	HNU3			X_{\perp}	>					
Total No. of Samples:		Meth	od of Shipm	nent:											
Relinquished By: Date/Time:		Rece	ived By:			ate/Time	e:			R	epor	ing F	orma	at: (check)	
JOHFBRADITYLIGHT 6-	5-01										NOF	RMAL		<u>×</u> S.D. НММD	
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ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532 Tustin, CA 92780 (714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4 Phoenix, AZ 85040

(602) 736-0960 Fax (602) 736-0970

REQUIRED TAT:

Lab Job No: _				
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CUSTOMER INFORM	ATION			PROJECT IN	ORMATIC	N		,	Heovestino		/ /				
COMPANY: ER/ER & KAIM	VOINSKI INC	PROJEC	TNAME: W7	=66				1/	E.			/ /	/ /	REMARKS/PRECAUTIONS	
SEND REPORT TO: RRAW AUCh	ARD.	NUMBER	" 9911	03.01				/ &	şz	//	/ /	¥.		Ž / / /	
ADDRESS:		LOCATIO	ON;					3			/ 29	y	/ 🗳	7 / / /	
		ADDRES	S: 5030	FIRES	tonE	BLVD		.		/ /			\mathcal{N}		
		_ ^		\ . I \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	'] ,	/ B		, Y	/ 5	']		
PHONE: FAX:		SAMPLE	OUTN E						47	14		C By			
SAMPLE ID		OF AINERS	SÁMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	/	<u>z</u> /	<u>/</u>		<u>L</u> ,		REMARKS/PRECAUTIONS	
RINSALE WATER		2 6	5-5-01	14.24	W	40 ML	HCL			_			X	HOLD-KUNFUR 8260 IF	
										_				AND DETECTIONS IN	
														RINSATE BLANK	
														(CALL EKI FIRST)	
		,	/ F () /			,54	41.46		_						
RINSATE WATER		•	6-5-01	14:24	W	ے در	HNO3		-		+ +			HOLD - RUN FOR HEXCHROL	1
											+ +			AND CAIN-17 HIETACS IF	l
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Total No. of Samples:		1	Metho	od of Shipm	ent:						<u> </u>				
L 1' 1 3'	Date/Time:		Rece	ived By:		Da	ate/Time	:			Rep	ortir	ıg Fo	ormat: (check)	!
MAN PENDER LIGHT	5-5	01									N	ORN	ΛAL	S.D. HMMD	
Relinquished By:	Date/Time:		Rece	ived By:		Da	ate/Time	:			R	WQ	СВ	OTHER	
Relinquished By:	Date/Time:		Recei	ived For Lat	By:	Da	ate/Time:	: ె(¿	, -2.	- (r)	San	nple	Integ	grity: (check)	
			E~	131 *	1							-	_	on ice	

APPENDIX C

Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RECEIVED

JUN 27 2001

ERLER & KALINOWSKI, INC. SANTA MONICA OFFICE

Client:

ERLER & KALINOWSKI, INC.

Date of Report:

06/18/01

Address:

3250 Ocean Park Blvd., Suite 385

Date Received:

06/01/01

Santa Monica, CA 90405

PAI Project No:

P2101179

Contact:

Mr. Brian Auchard

Purchase Order:

Verbal

Client Project ID: WEBB #961025.03

Eleven (11) Tedlar Bag Samples labeled:

"SVE-1"

"SVE-2"

"SVE-3"

LABORATORY REPORT

"VMP-1"

"VMP-2"

"SVE-D1"

"VMP-D2"

"VMP-D2"

"Blower Influent"

"Equip Blank"

"Blower Dup"

The samples were received at the laboratory under chain of custody on June 1, 2001. The samples were received intact. The dates of analyses are indicated on the attached data sheets.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. system used was comprised of a Hewlett Packard Model 5972 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets.

Reviewed and Approved:

Ling your

Reviewed and Approved:

Cindy Yoon

Analytical Chemist

Chris Parnell Senior Chemist

The results reported herein relate only to the samples received and in the condition indicated. In addition, this report may not be reproduced except in full, without the prior written approval of Performance Analytical Inc.

Performance Analytical Inc. Sample Acceptance Check Form

Client:	Erler & Kalinowsk	i, Inc.			Work order:	P2101179)		
Project:	Webb / 961025.03			. <u>. </u>					
Cooler/Sa	amples received on:	6/1/01		Date opened:	6/1/01	by	RD		
1	Were custody seals on Location of seal(s)?	outside of cool	er/Box?		Sealing Lid?		Yes □ □	<u>No</u> ⊠	<u>N/A</u> □ ⊠
	Were signature and of Were seals intact?		1		. •				X X
	Were custody seals on Location of seal(s)? Were signature and of Were seals intact?	date correct?			Sealing Lid?				X X
2 3 4	Were sample contained Were sample contained Were correct sample of	ers checked for i		X X X					
5 6	Were chain-of-custod Did sample container		X X						
7 8 9	Was adequate sample volume submitted? Are samples within specifide holding times? Was proper temperature of cooler at receipt adhered to?								
10	Is preservation neces Were samples subm Did analyst preserve Were <u>VOA vials</u> ch pH of samples check	itted preserved? the samples at lecked for presse	rature constant			n ?		⊠ □ □	I X X X
	Lah Sample ID	Required pH	pН	Comply (VA)	Headspace (Pressuraberry	Comply (vn)		t Added	Volume Added
P2101179-	001				NA				
P2101179-					NA				
P2101179-					NA				
P2101179-					NA NA				
P2101179-		_			NA NA				
P2101179- P2101179-					NA NA				
P2101179-					NA				
P2101179-		1			NA				
P2101179-	-010				NA				
P2101179-	-011				NA	ļ			
Explain	any discrepancies: (i	nclude lab sa	mple ID	numbers):		<u> </u>	<u> </u>		



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-1

PAI Sample ID : P2101179-001

Test Code : Modified EPA TO-15

Instrument : HP5972/Tekmar AUTOCan Elite

Date Received : 6/1/01

Analyst: Cindy Yoon Date Analyzed: 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.0015 Liter(s)

D.F. = 1.00

	COLONDO	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMΠ μg/m³	ppbV	ppbV
74.07.3	Chloromethane	ND	670	ND	320
74-87-3			670	ND	260
75-01-4	Vinyl Chloride	ND			
74-83-9	Bromomethane	ND	670	ND	170
75-00-3	Chloroethane	ND	670	ND	250
67-64-1	Acetone	ND	670	ND	280
75-69-4	Trichlorofluoromethane	ND	670	ND	120
75-35-4	1,1-Dichloroethene	ND	670	ND	170
75-09-2	Methylene chloride	ND	670	ND	190
76-13-1	Trichlorotrifluoroethane	ND	670	ND	87
75-15-0	Carbon Disulfide	ND	670	ND	210
156-60-5	trans-1,2-Dichloroethene	ND	670	ND	170
75-34-3	1,1-Dichloroethane	ND	670	ND	160
1634-04-4	Methyl tert-Butyl Ether	ND	670	ND	180
108-05-4	Vinyl Acetate	ND	670	ND	190
78-93-3	2-Butanone	ND	670	ND	230
156-59-2	cis-1,2-Dichloroethene	ND	670	ND	170
67-66-3	Chloroform	ND	670	ND	140
107-06-2	1,2-Dichloroethane	ND	670	ND	160
71-55-6	1,1,1-Trichloroethane	ND	670	ND	120
71-43-2	Benzene	3,600	670	1,100	210
56-23-5	Carbon Tetrachloride	ND	670	ND	110
78-87-5	1,2-Dichloropropane	ND	670	ND	140

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/14/01
• —			Page No.:



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-1

PAI Sample ID : P2101179-001

Test Code: Modified EPA TO-15

Date Sampled: 5/31/0

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01 6/1/01

Analyst: Cindy Yoon Matrix: Tedlar Bag Date Analyzed: Volume(s) Analyzed:

0.0015 Liter(s)

D.F. = 1.00

· I		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	670	ND	100
79-01-6	Trichloroethene	42,000	670	7,800	120
10061-01-5	cis-1,3-Dichloropropene	ND	670	ND	150
108-10-1	4-Methyl-2-pentanone	ND	670	ND	160
10061-02-6	trans-1,3-Dichloropropene	ND	670	ND	150
79-00-5	1,1,2-Trichloroethane	ND	670	ND	120
108-88-3	Toluene	ND	670	ND	180
591-78-6	2-Hexanone	ND	670	ND	160
124-48-1	Dibromochloromethane	ND	670	ND	78
106-93-4	1,2-Dibromoethane	ND	670	ND	87
127-18-4	Tetrachloroethene	22,000	670	3,300	98
108-90-7	Chlorobenzene	ND	670	ND	140
100-41-4	Ethylbenzene	ND	670	ND	150
136777-61-2	m,p-Xylenes	ND	670	ND	150
75-25-2	Bromoform	ND	670	ND	65
100-42-5	Styrene	ND	670	ND	160
95-47-6	o-Xylene	ND	670	ND	150
79-34-5	1,1,2,2-Tetrachloroethane	ND	670	ND	97
541-73-1	1,3-Dichlorobenzene	ND	670	ND	110
106-46-7	1,4-Dichlorobenzene	ND	670	ND	110
95-50-1	1,2-Dichlorobenzene	ND	670	ND	110

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:_	KR	Date:_	اماليال	



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2101179-002

Test Code: Modified EPA TO-15

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received: 6/1/01

Analyst: Cindy Yoon Date Analyzed: 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1,000	ND	480
75-01-4	Vinyl Chloride	ND	1,000	ND	390
74-83-9	Bromomethane	ND	1,000	ND	260
75-00-3	Chloroethane	ND	1,000	ND	380 -
67-64-1	Acetone	ND	1,000	ND	420
75-69-4	Trichlorofluoromethane	ND	1,000	ND	180
75-35-4	1,1-Dichloroethene	ND	1,000	ND	250
75-09-2	Methylene chloride	ND	1,000	ND	290
76-13-1	Trichlorotrifluoroethane	ND	1,000	ND	130
75-15-0	Carbon Disulfide	ND	1,000	ND	320
156-60-5	trans-1,2-Dichloroethene	ND	1,000	ND	250
75-34-3	1,1-Dichloroethane	ND	1,000	ND	250
1634-04-4	Methyl tert-Butyl Ether	ND	1,000	ND	280
108-05-4	Vinyl Acetate	ND	1,000	ND	280
78-93-3	2-Butanone	ND	1,000	ND	340
156-59-2	cis-1,2-Dichloroethene	ND	1,000	ND	250
67-66-3	Chloroform	ND	1,000	ND	200
107-06-2	1,2-Dichloroethane	ND	1,000	ND	250
71-55-6	1,1,1-Trichloroethane	ND	1,000	ND	180
71-43-2	Benzene	2,700	1,000	830	310
56-23-5	Carbon Tetrachloride	ND	1,000	ND	160
78-87-5	1,2-Dichloropropane	ND	1,000	ND	220

Verified By:	KR	Date:	6/14/01
· ——			Page No



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2101179-002

Test Code: Modified EPA TO-15

Date Sampled: 5/31/01

Page Page 194 : 6/1/01

Instrument: HP5972/Tekmar AUTOCan Elite Date Received: 6/1/01
Analyst: Cindy Yoon Date Analyzed: 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1,000	ND	150
79-01-6	Trichloroethene	55,000	1,000	10,000	190
10061-01-5	cis-1,3-Dichloropropene	ND	1,000	ND	220
108-10-1	4-Methyl-2-pentanone	ND	1,000	ND	240
10061-02-6	trans-1,3-Dichloropropene	ND	1,000	ND	220
79-00-5	1,1,2-Trichloroethane	ND	1,000	ND	180
108-88-3	Toluene	ND	1,000	ND	270
591-78-6	2-Hexanone	ND	1,000	ND	240
124-48-1	Dibromochloromethane	ND	1,000	ND	120
106-93-4	1,2-Dibromoethane	ND	1,000	ND	130
127-18-4	Tetrachloroethene	8,400	1,000	1,200	150
108-90-7	Chlorobenzene	ND	1,000	ND	220
100-41-4	Ethylbenzene	ND	1,000	ND	230
136777-61-2	m,p-Xylenes	ND	1,000	ND	230
75-25-2	Bromoform	ND	1,000	ND	97
100-42-5	Styrene	ND	1,000	ND	230
95-47-6	o-Xylene	ND	1,000	ND	230
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000	ND	150
541-73-1	1,3-Dichlorobenzene	ND	1,000	ND	170
106-46-7	1,4-Dichlorobenzene	ND	1,000	ND	170
95-50-1	1,2-Dichlorobenzene	ND	1,000	ND	170

Verified By:	KR	Date:	6/14/01
-			Page No



Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-3

Client

PAI Sample ID : P2101179-003

Test Code: Modified EPA TO-15

Instrument: HP5972/Tekmar AUTOCan Elite

Analyst: Cindy Yoon

Matrix: Tedlar Bag

Date Sampled: 5/31/01

6/1/01 Date Received: 6/1/01

Date Analyzed: Volume(s) Analyzed:

0.0020 Liter(s)

D.F. = 1.00

	- COLUMN TO THE	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	500	ND	240
75-01-4	Vinyl Chloride	ND	500	ND	200
74-83-9	Bromomethane	ND	500	ND	130
75-00-3	Chloroethane	ND	500	ND	190
67-64-1	Acetone	ND	500	ND	210
75-69-4	Trichlorofluoromethane	ND	500	ND	89
75-35-4	1,1-Dichloroethene	540	500	130	130
75-09-2	Methylene chloride	ND	500	ND	140
76-13-1	Trichlorotrifluoroethane	ND	500	ND	65
75-15-0	Carbon Disulfide	ND	500	ND	160
156-60-5	trans-1,2-Dichloroethene	ND	500	ND	130
75-34-3	1,1-Dichloroethane	ND	500	ND	120
1634-04-4	Methyl tert-Butyl Ether	ND	500	ND_	140
108-05-4	Vinyl Acetate	ND	500	ND	140
78-93-3	2-Butanone	ND	500	ND	170
156-59-2	cis-1,2-Dichloroethene	ND	500	ND	130
67-66-3	Chloroform	ND	500	ND	100
107-06-2	1,2-Dichloroethane	ND	500	ND	120
71-55-6	1,1,1-Trichloroethane	ND	500	ND	92
71-43-2	Benzene	3,500	500	1,100	160
56-23-5	Carbon Tetrachloride	ND	500	ND	80
78-87-5	1,2-Dichloropropane	ND	500	ND	110

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	te	Date:	6/14/01
			Page No.:



A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

: Erler & Kalinowski, Inc. Client

Client Sample ID : SVE-3

PAI Sample ID : P2101179-003

Date Sampled: 5/31/01 Test Code: Modified EPA TO-15

Date Received: 6/1/01 Instrument: HP5972/Tekmar AUTOCan Elite 6/1/01 Date Analyzed: Analyst: Cindy Yoon

0.0020 Liter(s) Volume(s) Analyzed: Matrix: Tedlar Bag

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV_
75-27-4	Bromodichloromethane	ND	500	ND	75
79-01-6	Trichloroethene	27,000	500	5,000	93
10061-01-5	cis-1,3-Dichloropropene	ND	500	ND	110
108-10-1	4-Methyl-2-pentanone	ND	500	ND	120
10061-02-6	trans-1,3-Dichloropropene	ND	500	ND	110
79-00-5	1,1,2-Trichloroethane	ND	500	ND	92
108-88-3	Toluene	ND	500	ND	130
591-78-6	2-Hexanone	ND	500	ND	120
124-48-1	Dibromochloromethane	ND	500	ND	59
106-93-4	1,2-Dibromoethane	ND	500	ND	65
127-18-4	Tetrachloroethene	12,000	500	1,800	74
108-90-7	Chlorobenzene	ND	500	ND	110
100-41-4	Ethylbenzene	ND	500	ND	120
136777-61-2	m,p-Xylenes	580	500	130	120
75-25-2	Bromoform	ND	500	ND	48
100-42-5	Styrene	ND	500	ND	120
95-47-6	o-Xylene	ND	500	ND	120
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	ND	73
541-73-1	1,3-Dichlorobenzene	ND	500	ND	83
106-46-7	1,4-Dichlorobenzene	ND	500	ND	83
95-50-1	1,2-Dichlorobenzene	ND	500	ND	83

Verified By:	KR	Date:	6/14/01
,			Page No.



Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

: Erler & Kalinowski, Inc. Client

Client Sample ID: VMP-1 PAI Sample ID: P2101179-004

Test Code: Modified EPA TO-15

Date Sampled: 5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/2/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMIT μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1,000	ND	480
75-01-4	Vinyl Chloride	ND	1,000	ND	390
74-83-9	Bromomethane	ND	1,000	ND	260
75-00-3	Chloroethane	ND	1,000	ND	380
67-64-1	Acetone	ND	1,000	ND	420
75-69-4	Trichlorofluoromethane	ND	1,000	ND	180
75-35-4	1,1-Dichloroethene	1,300	1,000	320	250
75-09-2	Methylene chloride	1,100	1,000	300	290
76-13-1	Trichlorotrifluoroethane	ND	1,000	ND	130
75-15-0	Carbon Disulfide	1,300	1,000	420	320
156-60-5	trans-1,2-Dichloroethene	ND	1,000	ND	250
75-34-3	1,1-Dichloroethane	ND	1,000	ND	250
1634-04-4	Methyl tert-Butyl Ether	ND	1,000	ND	280
108-05-4	Vinyl Acetate	ND	1,000	ND	280
78-93-3	2-Butanone	ND	1,000	ND	340
156-59-2	cis-1,2-Dichloroethene	ND	1,000	ND	250
67-66-3	Chloroform	ND	1,000	ND	200
	1,2-Dichloroethane	ND	1,000	ND	250
107-06-2		ND	1,000	ND	180
71-55-6	1,1,1-Trichloroethane	7,600	1,000	2,400	310
71-43-2	Benzene		1,000	2,400 ND	160
56-23-5	Carbon Tetrachloride	ND ND	1,000	ND	220
78-87-5	1,2-Dichloropropane	ND	1,000	IND	1 220

Verified By:	te	Date:	6/14/01
·			Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

: Erler & Kalinowski, Inc. Client

Client Sample ID: VMP-1

PAI Sample ID : P2101179-004

Test Code: Modified EPA TO-15 Instrument: HP5972/Tekmar AUTOCan Elite

5/31/01 Date Sampled: Date Received: 6/1/01 6/2/01 Date Analyzed:

Analyst: Cindy Yoon

Matrix: Tedlar Bag

0.0010 Liter(s) Volume(s) Analyzed:

D.F. = 1.00

<u> </u>		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV_
75-27-4	Bromodichloromethane	ND	1,000	ND	150
79-01-6	Trichloroethene	52,000	1,000	9,700	190
10061-01-5	cis-1,3-Dichloropropene	ND	1,000	ND	220
108-10-1	4-Methyl-2-pentanone	ND	1,000	ND	240
10061-02-6	trans-1,3-Dichloropropene	ND	1,000	ND	220
79-00-5	1,1,2-Trichloroethane	ND	1,000	ND	180
108-88-3	Toluene	ND	1,000	ND	270
591-78-6	2-Hexanone	ND	1,000	ND	240
124-48-1	Dibromochloromethane	ND	1,000	ND	120
106-93-4	1,2-Dibromoethane	ND	1,000	ND	130
127-18-4	Tetrachloroethene	19,000	1,000	2,800	150
108-90-7	Chlorobenzene	ND	1,000	ND	220
100-41-4	Ethylbenzene	ND	1,000	ND	230
136777-61-2	m,p-Xylenes	ND	1,000	ND	230
75-25-2	Bromoform	ND	1,000	ND	97
100-42-5	Styrene	ND	1,000	ND	230
95-47-6	o-Xylene	ND	1,000	ND	230
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000	ND	150
541-73-1	1,3-Dichlorobenzene	ND	1,000	ND	170
106-46-7	1,4-Dichlorobenzene	ND	1,000	ND	170
95-50-1	1,2-Dichlorobenzene	ND	1,000	ND	170

Verified By:	KR	Date:	6/14/01	
				Dana Mari



Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-2

PAI Sample ID : P2101179-005

Test Code: Modified EPA TO-15 Date Sampled:

Instrument: HP5972/Tekmar AUTOCan Elite Date Received: 6/1/01 Analyst: Cindy Yoon Date Analyzed: 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.20 Liter(s)

D.F. = 1.00

5/31/01

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMICOND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	ND	5.0	ND	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	350	5.0	150	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	ND	5.0	ND	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	ND	5.0	ND	1.4
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4
78-93-3	2-Butanone	150	5.0	51	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	32	5.0	5.9	0.92
71-43-2	Benzene	15	5.0	4.8	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

Verified By:	KR	Date:	امالىالى
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Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

PAI Sample ID : P2101179-005

Test Code: Modified EPA TO-15

Date Sampled: 5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

6/1/01

Analyst: Cindy Yoon

Date Received: 6/1/01 Date Analyzed:

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.20 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	310	5.0	57	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	8.5	5.0	2.1	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	92	5.0	24	1.3
591-78-6	2-Hexanone	25	5.0	6.0	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	160	5.0	24	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	27	5.0	6.3	1.2
136777-61-2	m,p-Xylenes	130	5.0	31	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	ND	5.0	ND	1.2
95-47-6	o-Xylene	55	5.0	13	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

Verified By:	KR	Date:	6/14/01	



Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

Client

PAI Sample ID: P2101179-005DUP

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/1/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.20 Liter(s)

D.F. = 1.00

	COLONIDA	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	ND	5.0	ND	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	360	5.0	150	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	ND	5.0	ND	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	ND	5.0	ND	1.4
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4
78-93-3	2-Butanone	150	5.0	52	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	32	5.0	5.9	0.92
71-43-2	Benzene	15	5.0	4.8	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Date: 6114101 KR Verified By: Page No.:

01179VOA.CY1 - 5DUP

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

PAI Sample ID: P2101179-005DUP

Test Code: Modified EPA TO-15

Instrument: HP5972/Tekmar AUTOCan Elite

Analyst: Cindy Yoon

Date Sampled: 5/31/01

6/1/01

Date Analyzed: 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.20 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	310	5.0	57	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	8.5	5.0	2.1	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	92	5.0	24	1.3
591-78-6	2-Hexanone	25	5.0	6.2	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	170	5.0	24	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	28	5.0	6.4	1.2
136777-61-2	m,p-Xylenes	130	5.0	31	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	ND	5.0	ND	1.2
95-47-6	o-Xylene	56	5.0	13	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/14/01	
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01179VOA.CY1 - 5DUP



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1

PAI Sample ID : P2101179-006

Test Code : Modified EPA TO-15

Instrument : HP5972/Tekmar AUTOCan Elite
Analyst : Cindy Yoon

Date Sampled : 5/31/01

6/1/01

Date Received : 6/1/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.0020 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMICOND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	500	ND	240
75-01-4	Vinyl Chloride	ND	500	ND	200
74-83-9	Bromomethane	ND	500	ND	130
75-00-3	Chloroethane	ND	500	ND	190
67-64-1	Acetone	ND	500	ND	210
75-69-4	Trichlorofluoromethane	ND	500	ND	89
75-35-4	1,1-Dichloroethene	ND	500	ND	130
75-09-2	Methylene chloride	ND	500	ND	140
76-13-1	Trichlorotrifluoroethane	ND	500	ND	65
75-15-0	Carbon Disulfide	ND	500	ND	160
156-60-5	trans-1,2-Dichloroethene	ND	500	ND	130
75-34-3	1,1-Dichloroethane	ND	500	ND	120
1634-04-4	Methyl tert-Butyl Ether	ND	500	ND	140
108-05-4	Vinyl Acetate	ND	500	ND	140
78-93-3	2-Butanone	ND	500	ND	170
156-59-2	cis-1,2-Dichloroethene	ND	500	ND	130
67-66-3	Chloroform	ND	500	ND	100
107-06-2	1,2-Dichloroethane	ND	500	ND	120
71-55-6	1,1,1-Trichloroethane	ND	500	ND	92
71-43-2	Benzene	3,800	500	1,200	160
56-23-5	Carbon Tetrachloride	ND	500	ND	80
78-87-5	1,2-Dichloropropane	ND	500	ND	110

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Air Quality Laboratory A Division of Columbia Analytical Services, Inc.

RESULTS OF ANALYSIS

PAGE 2 OF 2

: Erler & Kalinowski, Inc. Client

Client Sample ID : SVE-D1 PAI Sample ID: P2101179-006

Date Sampled: 5/31/01 Test Code: Modified EPA TO-15 Date Received: 6/1/01 Instrument: HP5972/Tekmar AUTOCan Elite 6/1/01 Date Analyzed: Analyst: Cindy Yoon

Volume(s) Analyzed: 0.0020 Liter(s) Matrix: Tedlar Bag

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	a/m³	LIMIT	ppbV	ppbV
		μg/m³	μg/m³		
75-27-4	Bromodichloromethane	ND	500	ND	75
79-01-6	Trichloroethene	34,000	500	6,400	93
10061-01-5	cis-1,3-Dichloropropene	ND	500	ND	110
108-10-1	4-Methyl-2-pentanone	ND	500	ND	120
10061-02-6	trans-1,3-Dichloropropene	ND	500	ND	110
79-00-5	1,1,2-Trichloroethane	ND	500	ND	92
108-88-3	Toluene	520	500	140	130
591-78-6	2-Hexanone	ND	500	ND	120
124-48-1	Dibromochloromethane	ND	500	ND	59
106-93-4	1,2-Dibromoethane	ND	500	ND	65
127-18-4	Tetrachloroethene	730	500	110	74
108-90-7	Chlorobenzene	ND	500	ND	110
100-41-4	Ethylbenzene	ND	500	ND	120
136777-61-2	m,p-Xylenes	800	500	180	120
75-25-2	Bromoform	ND	500	ND	48
100-42-5	Styrene	ND	500	ND	120
95-47-6	o-Xylene	ND	500	ND	120
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	ND	73
541-73-1	1,3-Dichlorobenzene	ND	500	ND	83
106-46-7	1,4-Dichlorobenzene	ND	500	ND	83
95-50-1	1,2-Dichlorobenzene	ND	500	ND	83

Verified By:	K.R.	Date:	6/14/01	
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Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-D1

PAI Sample ID : P2101179-007

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/1/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMIT μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	ND	100	ND	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone	ND	100	ND	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

Verified By:	KR	Date: 614/01



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : VMP-D1
PAI Sample ID : P2101179-007

Test Code: Modified EPA TO-15

Date Sampled: 5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

d: 3/31/01

Analyst : Cindy Yoon

Date Received: 6/1/01 Date Analyzed: 6/1/01

Matrix : Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	6,000	100	1,100	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	270	100	72	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	2,700	100	400	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	ND	100	ND	23
136777-61-2	m,p-Xylenes	450	100	100	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	180	100	43	23
95-47-6	o-Xylene	ND	100	ND	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR_	Date:	4114
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Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-D2

PAI Sample ID : P2101179-008

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

6/2/01

Volume(s) Analyzed:

0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	, ,	LIMIT	1-17	LIMIT
		μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1,000	ND	480
75-01-4	Vinyl Chloride	ND	1,000	ND	390
74-83-9	Bromomethane	ND	1,000	ND	260
75-00-3	Chloroethane	ND	1,000	ND	380
67-64-1	Acetone	ND	1,000	ND	420
75-69-4	Trichlorofluoromethane	ND	1,000	ND	180
75-35-4	1,1-Dichloroethene	1,500	1,000	370	250
75-09-2	Methylene chloride	ND	1,000	ND	290
76-13-1	Trichlorotrifluoroethane	ND	1,000	ND	130
75-15-0	Carbon Disulfide	1,400	1,000	450	320
156-60-5	trans-1,2-Dichloroethene	ND	1,000	ND	250
75-34-3	1,1-Dichloroethane	ND	1,000	ND	250
1634-04-4	Methyl tert-Butyl Ether	ND	1,000	ND	280
108-05-4	Vinyl Acetate	ND	1,000	ND	280
78-93-3	2-Butanone	ND	1,000	ND	340
156-59-2	cis-1,2-Dichloroethene	ND	1,000	ND	250
67-66-3	Chloroform	ND	1,000	ND	200
107-06-2	1,2-Dichloroethane	ND	1,000	ND	250
71-55-6	1,1,1-Trichloroethane	ND	1,000	ND	180
71-43-2	Benzene	8,700	1,000	2,700	310
56-23-5	Carbon Tetrachloride	ND	1,000	ND	160
78-87-5	1,2-Dichloropropane	ND	1,000	ND	220

Verified By:	KR	Date: 6 14 01
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Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2

PAI Sample ID : P2101179-008

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/2/01 0.0010 Liter(s)

Matrix: Tedlar Bag

Volume(s) Analyzed:

D.F. = 1.00

<u> </u>	<u>, </u>	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1,000	ND	150
79-01-6	Trichloroethene	60,000	1,000	11,000	190
10061-01-5	cis-1,3-Dichloropropene	ND	1,000	ND	220
108-10-1	4-Methyl-2-pentanone	ND	1,000	ND	240
10061-02-6	trans-1,3-Dichloropropene	ND	1,000	ND	220
79-00-5	1,1,2-Trichloroethane	ND	1,000	ND	180
108-88-3	Toluene	1,400	1,000	380	270
591-78-6	2-Hexanone	ND	1,000	ND	240
124-48-1	Dibromochloromethane	ND	1,000	ND	120
106-93-4	1,2-Dibromoethane	ND	1,000	ND	130
127-18-4	Tetrachloroethene	25,000	1,000	3,800	150
108-90-7	Chlorobenzene	ND	1,000	ND	220
100-41-4	Ethylbenzene	ND	1,000	ND	230
136777-61-2	m,p-Xylenes	ND	1,000	ND	230
75-25-2	Bromoform	ND	1,000	ND	97
100-42-5	Styrene	ND	1,000	ND	230
95-47-6	o-Xylene	ND	1,000	ND	230
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000	ND	150
541-73-1	1,3-Dichlorobenzene	ND	1,000	ND	170
106-46-7	1,4-Dichlorobenzene	ND	1,000	ND	170
95-50-1	1,2-Dichlorobenzene	ND	1,000	ND	170

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/14/01
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Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: Blower Influent

PAI Sample ID : P2101179-009

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/1/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0015 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	670	ND	320
75-01-4	Vinyl Chloride	ND	670	ND	260
74-83-9	Bromomethane	ND	670	ND	170
75-00-3	Chloroethane	ND	670	ND	250
67-64-1	Acetone	ND	670	ND	280
75-69-4	Trichlorofluoromethane	ND	670	ND	120
75-35-4	1,1-Dichloroethene	ND	670	ND	170
75-09-2	Methylene chloride	ND	670	ND	190
76-13-1	Trichlorotrifluoroethane	ND	670	ND	87
75-15-0	Carbon Disulfide	ND	670	ND	210
156-60-5	trans-1,2-Dichloroethene	ND	670	ND	170
75-34-3	1,1-Dichloroethane	ND	670	ND	160
1634-04-4	Methyl tert-Butyl Ether	ND	670	ND	180
108-05-4	Vinyl Acetate	ND	670	ND	190
78-93-3	2-Butanone	ND	670	ND	230
156-59-2	cis-1,2-Dichloroethene	ND	670	ND	170
67-66-3	Chloroform	ND	670	ND	140
107-06-2	1,2-Dichloroethane	ND	670	ND	160
71-55-6	1,1,1-Trichloroethane	ND	670	ND	120
71-43-2	Benzene	4,600	670	1,400	210
56-23-5	Carbon Tetrachloride	ND	670	ND	110
78-87-5	1,2-Dichloropropane	ND	670	ND	140

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

6/14/01 KR Verified By: Date:



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Blower Influent PAI Sample ID : P2101179-009

Test Code: Modified EPA TO-15

Date Sampled: 5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01 6/1/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

Volume(s) Analyzed: 0.0015 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
1		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	670	ND	100
79-01-6	Trichloroethene	36,000	670	6,800	120
10061-01-5	cis-1,3-Dichloropropene	ND	670	ND	150
108-10-1	4-Methyl-2-pentanone	ND	670	ND	160
10061-02-6	trans-1,3-Dichloropropene	ND	670	ND	150
79-00-5	1,1,2-Trichloroethane	ND	670	ND	120
108-88-3	Toluene	ND	670	ND	180
591-78-6	2-Hexanone	ND	670	ND	160
124-48-1	Dibromochloromethane	ND	670	ND	78
106-93-4	1,2-Dibromoethane	ND	670	ND	87
127-18-4	Tetrachloroethene	12,000	670	1,800	98
108-90-7	Chlorobenzene	ND	670	ND	140
100-41-4	Ethylbenzene	ND	670	ND	150
136777-61-2	m,p-Xylenes	ND	670	ND	150
75-25-2	Bromoform	ND	670	ND	65
100-42-5	Styrene	ND	670	ND	160
95-47-6	o-Xylene	ND	670	ND	150
79-34-5	1,1,2,2-Tetrachloroethane	ND	670	ND	97
541-73-1	1,3-Dichlorobenzene	ND	670	ND	110
106-46-7	1,4-Dichlorobenzene	ND	670	ND	110
95-50-1	1,2-Dichlorobenzene	ND	670	ND	110

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	ke	Date:	6/14/01
			Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: Equip Blank

PAI Sample ID : P2101179-010

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01 6/2/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed: Volume(s) Analyzed:

0.10 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	10	ND	4.8
75-01-4	Vinyl Chloride	ND	10	ND	3.9
74-83-9	Bromomethane	ND	10	ND	2.6
75-00-3	Chloroethane	ND	10	ND	3.8
67-64-1	Acetone	19	10	8.2	4.2
75-69-4	Trichlorofluoromethane	ND	10	ND	1.8
75-35-4	1,1-Dichloroethene	ND	10	ND	2.5
75-09-2	Methylene chloride	ND	10	ND	2.9
76-13-1	Trichlorotrifluoroethane	ND	10	ND	1.3
75-15-0	Carbon Disulfide	ND	10	ND	3.2
156-60-5	trans-1,2-Dichloroethene	ND	10	ND	2.5
75-34-3	1,1-Dichloroethane	ND	10	ND	2.5
1634-04-4	Methyl tert-Butyl Ether	ND	10	ND	2.8
108-05-4	Vinyl Acetate	ND	10	ND	2.8
78-93-3	2-Butanone	ND	10	ND	3.4
156-59-2	cis-1,2-Dichloroethene	ND	10	ND_	2.5
67-66-3	Chloroform	ND	10	ND	2.0
107-06-2	1,2-Dichloroethane	ND	10	ND	2.5
71-55-6	1,1,1-Trichloroethane	12	10	2.3	1.8
71-43-2	Benzene	14	10	4.5	3.1
56-23-5	Carbon Tetrachloride	ND	10	ND	1.6
78-87-5	1,2-Dichloropropane	ND	10	ND	2.2

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Date: 6/14/01 KR Verified By: Page No.:



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : Equip Blank

PAI Sample ID : P2101179-010

Test Code: Modified EPA TO-15

5/31/01 Date Sampled:

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

6/1/01

Analyst: Cindy Yoon

Date Analyzed:

6/2/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.10 Liter(s)

D.F. = 1.00

CAC#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	10	ND	1.5
79-01-6	Trichloroethene	67	10	12	1.9
10061-01-5	cis-1,3-Dichloropropene	ND	10	ND	2.2
108-10-1	4-Methyl-2-pentanone	ND	10	ND	2.4
10061-02-6	trans-1,3-Dichloropropene	ND	10	ND	2.2
79-00-5	1,1,2-Trichloroethane	ND	10	ND	1.8
108-88-3	Toluene	66	10	17	2.7
591-78-6	2-Hexanone	ND	10	ND	2.4
124-48-1	Dibromochloromethane	ND	10	ND	1.2
106-93-4	1,2-Dibromoethane	ND	10	ND	1.3
127-18-4	Tetrachloroethene	35	10	5.1	1.5
108-90-7	Chlorobenzene	ND	10	ND	2.2
100-41-4	Ethylbenzene	18	10	4.1	2.3
136777-61-2	m,p-Xylenes	88	10	20	2.3
75-25-2	Bromoform	ND	10	ND	0.97
100-42-5	Styrene	ND	10	ND	2.3
95-47-6	o-Xylene	37	10	8.4	2.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	10	ND	1.7
106-46-7	1,4-Dichlorobenzene	ND	10	ND	1.7
95-50-1	1,2-Dichlorobenzene	ND	10	ND	1.7

Verified By:	te	Date:_	6/14/01
			Page No.



Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Blower Dup PAI Sample ID : P2101179-011

Test Code : Modified EPA TO-15

Instrument : HP5972/Tekmar AUTOCan Elite

Analyst : Cindy Yoon

Date Sampled : 5/31/01

Date Received : 6/1/01

Date Analyzed : 6/1/01

Matrix : Tedlar Bag Volume(s) Analyzed : 0.0015 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMECUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	670	ND	320
75-01-4	Vinyl Chloride	ND	670	ND	260
74-83-9	Bromomethane	ND	670	ND	170
75-00-3	Chloroethane	ND	670	ND	250
67-64-1	Acetone	ND	670	ND	280
75-69-4	Trichlorofluoromethane	ND	670	ND	120
75-35-4	1,1-Dichloroethene	ND	670	ND	170
75-09-2	Methylene chloride	ND	670	ND	190
76-13-1	Trichlorotrifluoroethane	ND	670	ND	87
75-15-0	Carbon Disulfide	ND	670	ND	210
156-60-5	trans-1,2-Dichloroethene	ND	670	ND	170
75-34-3	1,1-Dichloroethane	ND	670	ND	160
1634-04-4	Methyl tert-Butyl Ether	ND	670	ND	180
108-05-4	Vinyl Acetate	ND	670	ND	190
78-93-3	2-Butanone	ND	670	ND	230
156-59-2	cis-1,2-Dichloroethene	ND	670	ND	170
67-66-3	Chloroform	ND	670	ND	140
107-06-2	1,2-Dichloroethane	ND	670	ND	160
71-55-6	1,1,1-Trichloroethane	ND	670	ND	120
71-43-2	Benzene	4,700	670	1,500	210
56-23-5	Carbon Tetrachloride	ND	670	ND	110
78-87-5	1,2-Dichloropropane	ND	670	ND	140

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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		Page No.:



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Blower Dup PAI Sample ID : P2101179-011

Test Code: Modified EPA TO-15

Date Sampled:

5/31/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received: 6/1/01

Date Analyzed:

6/1/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0015 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	670	ND	100
79-01-6	Trichloroethene	37,000	670	7,000	120
10061-01-5	cis-1,3-Dichloropropene	ND	670	ND	150
108-10-1	4-Methyl-2-pentanone	ND	670	ND	160
10061-02-6	trans-1,3-Dichloropropene	ND	670	ND	150
79-00-5	1,1,2-Trichloroethane	ND	670	ND	120
108-88-3	Toluene	ND	670	ND	180
591-78-6	2-Hexanone .	ND	670	ND	160
124-48-1	Dibromochloromethane	ND	670	ND	78
106-93-4	1,2-Dibromoethane	ND	670	ND	87
127-18-4	Tetrachloroethene	12,000	670	1,800	98
108-90-7	Chlorobenzene	ND	670	ND	140
100-41-4	Ethylbenzene	ND	670	ND	150
136777-61-2	m,p-Xylenes	ND	670	ND	150
75-25-2	Bromoform	ND	670	ND	65
100-42-5	Styrene	ND	670	ND	160
95-47-6	o-Xylene	ND	670	ND	150
79-34-5	1,1,2,2-Tetrachloroethane	ND	670	ND	97
541-73-1	1,3-Dichlorobenzene	ND	670	ND	110
106-46-7	1,4-Dichlorobenzene	ND	670	ND	110
95-50-1	1,2-Dichlorobenzene	ND	670	ND	110

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/14/01
			Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P010601-MB

Test Code: Modified EPA TO-15

Date Sampled:

NA

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

NA

6/01/01

Analyst : Cindy Yoon Matrix : Tedlar Bag Date Analyzed: Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

G.G.	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/14/01	
				Page No :

01179VOA.CY1 - MBlank



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : Method Blank PAI Sample ID : P010601-MB

Test Code: Modified EPA TO-15

Date Sampled:

NA

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

NA

Analyst : Cindy Yoon Matrix : Tedlar Bag Date Analyzed:

6/01/01

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

0.10.11	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	Ke	Date: 6114 01
		Page No :

01179VOA.CY1 - MBlank



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RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P010602-MB

Test Code: Modified EPA TO-15

Date Sampled:

NA

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

NA 6/02/01

Analyst : Cindy Yoon Matrix : Tedlar Bag Date Analyzed:

1.00 Liter(s)

Volume(s) Analyzed:

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppb∨	ppbV
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	re.	Date:	6/14/01
			Page No.:

01179VOA.CY1 - MBlank (2)



RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P010602-MB

Test Code : Modified EPA TO-15

Instrument : HP5972/Tekmar AUTOCan Elite
Analyst : Cindy Yoon

Date Received : NA

Date Received : NA

Output

Date Analyzed : 6/02/01

Matrix: Tedlar Bag Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

			,		· · · · · · · · · · · · · · · · · · ·
		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/14/01
			Page No.:

01179VOA.CY1 - MBlank (2)
2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270

Félor & Kali	riowski, inc.		CHAIN OF CUSTODY /	Sample and	LYSIS REQUEST Analytical Laboratory: PERF	ORMANCE ANAlytical
Project Num		5.03		•	Date Sampled: 5-31-01	
Project Nam	ne: WZbb		CTRACTION SUSTEM	-	Report Results To: BRIAN A	achard.
Location:			- SOUTH GATE		Phone Number: (310) 314-88	Results
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requests (EPA Method Numbe	r) (Date/Time)
-001	SVE-1	VAPOR	IC TEDLAR	15:58	TO-14	2 WEEKS
-002	Sve-2		14 TEDLAR	15:50		
-003	SVE-3		50 TEDGAR	15:05		
-004	VMP-1		54 TEDGAR	14:43		

15:34 15:20 12:84

SUE-DI 54 TEDLAR 14:54 VMP-DI _001 VMP-DZ 15:15 -008 56 TEDLAR 15:36 -009 56 TEDLAR 15:45 -010 56 TEDLAR Special Instructions:

54 TEDLAR

54 TEDLAR

-005

006

VMP-2

Relinquished By: Name / Signature / Affiliation	Date	Time	Received By: Name / Signature / Affi	listion	
BRIAN AUCHARD / Mi an	/EKI 6/1/01	8130	4 Farrar J.F	anyar	PAI
		<u> </u>			1

Flor & Kall	nowski, inc.			-	Nualytical Laboratory: PERFORMANCE Date Sampled: 5-31-01	
roject Hun	nber: 9610	725.03				
roject Nam	ne: WE66				sampled By: RIA +JRU	
ource of				•	Report Results To: BRIAN Auchard	
Location:	5030 FR	ESTONE 7	BLVD - SOUTHGATE	·	Phone Number: (310) 314-8855	Results
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Hethod Humber)	Required By (Date/Time)
-011	BLOWER DUP	VAPOR.	56 TEOLAR	15:38	TO-14	2 WEEKS
<u> </u>						
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		-				

Brian ALHARO / M. Com /EKI 6/1/01 8:30 STUNOV & FOME PHI	Relinquished By: Name / Signature / Affiliation	Date	Time	Received By: Name / Signature	/ Affiliation-	- 37
		18KI 6/1/01	8:30	JEUNOV	J. Farra	<u> </u>



Air Quality Laboratory A Division of Columbia Analytical Services, Inc An Employee Owned Company

RECEIVED

JUL - 3 2001

LABORATORY REPORT

ERLER & KALINOWSKI, INC. SANTA MONICA OFFICE

Client:

ERLER & KALINOWSKI, INC.

Date of Report:

06/27/01

Address:

3250 Ocean Park Blvd., Suite 385

Date Received:

06/14/01

Santa Monica, CA 90405

PAI Project No:

P2101311

Contact:

Mr. Brian Auchard

Purchase Order:

Verbal

Client Project ID: WEBB #961025.03

Eleven (11) Tedlar Bag Samples labeled:

"SVE-1"

"SVE-2"

"SVE-3"

"SVE-D1"

"VMP-1"

"VMP-2"

"VMP-D1"

"VMP-D2"

"Blower Influent"

"Blower Inf Dup"

"Equip Blank"

The samples were received at the laboratory under chain of custody on June 14, 2001. The samples were received intact. The dates of analyses are indicated on the attached data sheets.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets.

Reviewed and Approved:

Reviewed and Approved:

Wade Henton

Senior Chemist

Chris Parnell Senior Chemist

The results reported herein relate only to the samples received and in the condition indicated. In addition, this report may not be reproduced except in full, without the prior written approval of Performance Analytical Inc.



Air Quality Laboratory
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An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: SVE-1

PAI Sample ID : P2101311-001

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix : Tedlar Bag

01311VOA.WH1 - Sample

Volume(s) Analyzed:

0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	,	LIMIT	,	LIMIT
		μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1,000	ND	480
75-01-4	Vinyl Chloride	ND	1,000	ND	390
74-83-9	Bromomethane	ND	1,000	ND	260
75-00-3	Chloroethane	ND	1,000	ND	380
67-64-1	Acetone	ND	1,000	ND	420
75-69-4	Trichlorofluoromethane	ND	1,000	ND	180
75-35-4	1,1-Dichloroethene	ND	1,000	ND	250
75-09-2	Methylene chloride	ND	1,000	ND	290
76-13-1	Trichlorotrifluoroethane	ND	1,000	ND	130
75-15-0	Carbon Disulfide	ND_	1,000	ND	320
156-60-5	trans-1,2-Dichloroethene	ND	1,000	ND	250
75-34-3	1,1-Dichloroethane	ND	1,000	ND	250
1634-04-4	Methyl tert-Butyl Ether	ND	1,000	ND	280
108-05-4	Vinyl Acetate	ND	1,000	ND	280
78-93-3	2-Butanone	ND	1,000	ND	340
156-59-2	cis-1,2-Dichloroethene	ND	1,000	ND	250
67-66-3	Chloroform	ND	1,000	ND	200
107-06-2	1,2-Dichloroethane	ND	1,000	ND ND	250
71-55-6	1,1,1-Trichloroethane	ND	1,000	ND	180
71-43-2	Benzene	ND	1,000	ND	310
56-23-5	Carbon Tetrachloride	ND	1,000	ND	160
78-87-5	1,2-Dichloropropane	ND	1,000	ND	220

Verified By:	<u>ke</u> Dat	e: 6/25/01
		Page No.:



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-1

PAI Sample ID : P2101311-001

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix : Tedlar Bag

Volume(s) Analyzed:

0.0010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMIT µg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1,000	ND	150
79-01-6	Trichloroethene	61,000	1,000	11,000	190
10061-01-5	cis-1,3-Dichloropropene	ND	1,000	ND	220
108-10-1	4-Methyl-2-pentanone	ND	1,000	ND	240
10061-02-6	trans-1,3-Dichloropropene	ND	1,000	ND	220
79-00-5	1,1,2-Trichloroethane	ND	1,000	ND	180
108-88-3	Toluene	ND	1,000	ND	270
591-78-6	2-Hexanone	ND	1,000	ND	240
124-48-1	Dibromochloromethane	ND	1,000	ND	120
106-93-4	1,2-Dibromoethane	ND	1,000	ND	130
127-18-4	Tetrachloroethene	27,000	1,000	3,900	150
108-90-7	Chlorobenzene	ND	1,000	ND	220
100-41-4	Ethylbenzene	ND	1,000	ND	230
136777-61-2	m,p-Xylenes	ND	1,000	ND	230
75-25-2	Bromoform	ND	1,000	ND	97
100-42-5	Styrene	ND	1,000	ND	230
95-47-6	o-Xylene	ND	1,000	ND	230
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000	ND	150
541-73-1	1,3-Dichlorobenzene	ND	1,000	ND	170
106-46-7	1,4-Dichlorobenzene	ND	1,000	ND	170
95-50-1	1,2-Dichlorobenzene	ND	1,000	ND	170

Verified By:	KR	Date:_	6/25/01
<u></u>			Page No.:



01311VOA.WH1 - Sample (2)

Performance Analytical Inc.

Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2101311-002

Test Code : Modified EPA TO-15

Instrument : HP5973/Tekmar AUTOCan Elite
Analyst : Wade Henton

Date Sampled : 6/14/01

6/14/01

Date Analyzed : 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.00050 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppb∨
74-87-3	Chloromethane	ND	2,000	ND	970
75-01-4	Vinyl Chloride	ND	2,000	ND	780
74-83-9	Bromomethane	ND	2,000	ND	520
75-00-3	Chloroethane	ND	2,000	ND	760
67-64-1	Acetone	ND	2,000	ND	840
75-69-4	Trichlorofluoromethane	ND	2,000	ND	360
75-35-4	1,1-Dichloroethene	ND	2,000	ND	500
75-09-2	Methylene chloride	ND	2,000	ND	580
76-13-1	Trichlorotrifluoroethane	ND	2,000	ND	260
75-15-0	Carbon Disulfide	ND	2,000	ND	640
156-60-5	trans-1,2-Dichloroethene	ND	2,000	ND	500
75-34-3	1,1-Dichloroethane	ND	2,000	ND	490
1634-04-4	Methyl tert-Butyl Ether	ND	2,000	ND	550
108-05-4	Vinyl Acetate	ND	2,000	ND	570
78-93-3	2-Butanone	ND	2,000	ND	680
156-59-2	cis-1,2-Dichloroethene	ND	2,000	ND	500
67-66-3	Chloroform	ND	2,000	ND	410
107-06-2	1,2-Dichloroethane	ND	2,000	ND	490
71-55-6	1,1,1-Trichloroethane	ND	2,000	ND	370
71-43-2	Benzene	ND	2,000	ND	630
56-23-5	Carbon Tetrachloride	ND	2,000	ND	320
78-87-5	1.2-Dichloropropane	ND	2,000	ND	430

Ver	rified By:	ke	Date: 4/25/01
			Page No.:



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: SVE-2

PAI Sample ID : P2101311-002

Test Code : Modified EPA TO-15

Instrument : HP5973/Tekmar AUTOCan Elite
Analyst : Wade Henton

Date Sampled : 6/14/01

Date Received : 6/14/01

Date Analyzed : 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.00050 Liter(s)

D.F. = 1.00

RESULT REPORTING REPORTING RESULT LIMIT **COMPOUND** LIMIT CAS# $\mu g/m^3$ ppbV ppbV $\mu g/m^3$ 2,000 ND 300 Bromodichloromethane 75-27-4 370 22,000 120,000 2,000 Trichloroethene 79-01-6 440 ND ND 2,000 cis-1,3-Dichloropropene 10061-01-5 ND 490 ND 2,000 4-Methyl-2-pentanone 108-10-1 440 ND 2,000 ND 10061-02-6 trans-1,3-Dichloropropene ND 370 ND 2.000 1,1,2-Trichloroethane 79-00-5 530 ND 2.000 ND Toluene 108-88-3 ND 490 ND 2,000 591-78-6 2-Hexanone ND 2,000 ND 230 Dibromochloromethane 124-48-1 ND 260 ND 2,000 1.2-Dibromoethane 106-93-4 300 520 3,500 2,000 Tetrachloroethene 127-18-4 430 ND ND 2,000 Chlorobenzene 108-90-7 ND 460 ND 2,000 Ethylbenzene 100-41-4 460 ND ND 2,000 m,p-Xylenes 136777-61-2 190 ND Bromoform ND 2.000 75-25-2 470 ND ND 2,000 Styrene 100-42-5 ND ND 460 2,000 95-47-6 o-Xylene 290 ND 2,000 ND 1,1,2,2-Tetrachloroethane 79-34-5 ND 330 ND 1.3-Dichlorobenzene 2,000 541-73-1 ND 330 ND 2,000 106-46-7 1,4-Dichlorobenzene ND 330 ND 2,000 1,2-Dichlorobenzene 95-50-1

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	وعا	25	01	
• —					Pa	ge No.:

01311VOA.WH1 - Sample (2)



Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-3

PAI Sample ID : P2101311-003

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

0154	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	130	100	33	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone	1,700	100	580	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

Verified By:	KR	Date:	6/25/01
-			Page No.:



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-3

PAI Sample ID : P2101311-003

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

GAG #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	8,400	100	1,600	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	350	100	93	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	4,000	100	590	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	140	100	32	23
136777-61-2	m,p-Xylenes	680	100	160	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	ND	100	ND	23
95-47-6	o-Xylene	290	100	67	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	
			Dage No:

01311VOA.WH1 - Sample (3)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1 PAI Sample ID : P2101311-004

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton Matrix: Tedlar Bag

Date Analyzed: 6/15/01

Volume(s) Analyzed: 0.00010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	4	LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	10,000	ND	4,800
75-01-4	Vinyl Chloride	ND	10,000	ND	3,900
74-83-9	Bromomethane	ND	10,000	ND	2,600
75-00-3	Chloroethane	ND	10,000	ND	3,800
67-64-1	Acetone	ND	10,000	ND	4,200
75-69-4	Trichlorofluoromethane	ND	10,000	ND	1,800
75-35-4	1,1-Dichloroethene	ND	10,000	ND	2,500
75-09-2	Methylene chloride	ND	10,000	ND	2,900
76-13-1	Trichlorotrifluoroethane	ND	10,000	ND	1,300
75-15-0	Carbon Disulfide	ND	10,000	ND	3,200
156-60-5	trans-1,2-Dichloroethene	ND	10,000	ND	2,500
75-34-3	1,1-Dichloroethane	ND	10,000	ND	2,500
1634-04-4	Methyl tert-Butyl Ether	ND	10,000	ND	2,800
108-05-4	Vinyl Acetate	ND	10,000	ND	2,800
78-93-3	2-Butanone	ND	10,000	ND	3,400
156-59-2	cis-1,2-Dichloroethene	ND	10,000	ND	2,500
67-66-3	Chloroform	ND	10,000	ND	2,000
107-06-2	1,2-Dichloroethane	ND	10,000	ND	2,500
71-55-6	1,1,1-Trichloroethane	ND	10,000	ND_	1,800
71-43-2	Benzene	ND	10,000	ND	3,100
56-23-5	Carbon Tetrachloride	ND	10,000	ND	1,600
78-87-5	1,2-Dichloropropane	ND	10,000	ND	2,200

Verified By:	ke	Date: 6/35/01
		Page No :



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1
PAI Sample ID : P2101311-004

Test Code: Modified EPA TO-15

Instrument: HP5973/Tekmar AUTOCan Elite Date Received: 6/14/01
Analyst: Wade Henton Date Analyzed: 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.00010 Liter(s)

D.F. = 1.00

Date Sampled: 6/14/01

G . G . '	COL TOURT	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75.07.4	Bromodichloromethane	ND	10,000	ND	1,500
75-27-4				140,000	1,900
79-01-6	Trichloroethene	750,000	10,000		
10061-01-5	cis-1,3-Dichloropropene	ND	10,000	ND	2,200
108-10-1	4-Methyl-2-pentanone	ND	10,000	ND	2,400
10061-02-6	trans-1,3-Dichloropropene	ND	10,000	ND	2,200
79-00-5	1,1,2-Trichloroethane	ND	10,000	ND	1,800
108-88-3	Toluene	ND	10,000	ND	2,700
591-78-6	2-Hexanone	ND	10,000	ND	2,400
124-48-1	Dibromochloromethane	ND	10,000	ND	1,200
106-93-4	1,2-Dibromoethane	ND	10,000	ND	1,300
127-18-4	Tetrachloroethene	ND	10,000	ND	1,500
108-90-7	Chlorobenzene	ND	10,000	ND	2,200
100-41-4	Ethylbenzene	ND	10,000	ND	2,300
136777-61-2	m,p-Xylenes	ND	10,000	ND	2,300
75-25-2	Bromoform	ND	10,000	ND	970
100-42-5	Styrene	ND	10,000	ND	2,300
95-47-6	o-Xylene	ND	10,000	ND	2,300
79-34-5	1,1,2,2-Tetrachloroethane	ND	10,000	ND	1,500
541-73-1	1,3-Dichlorobenzene	ND	10,000	ND	1,700
106-46-7	1,4-Dichlorobenzene	ND	10,000	ND	1,700
95-50-1	1,2-Dichlorobenzene	ND	10,000	ND	1,700

	Verified By:	ke.	Date:	6/25/01
01311VOA.WH1 - Sample (4)	-	,		Page No.:



A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : VMP-1
PAI Sample ID : P2101311-005

Test Code: Modified EPA TO-15

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Date Received: 6/14/01

Analyst: Wade Henton Date Analyzed: 6/15/01

Matrix : Tedlar Bag Volume(s) Analyzed : 0.050 Liter(s)

D.F. = 1.00

	COL MOLTATO	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS #	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	49	20	21	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	34	20	8.6	5.0
75-09-2	Methylene chloride	ND	20	ND_	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone	56	20	19	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	28	20	5.1	3.7
71-43-2	Benzene	33	20	10	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

	Verified By:	KR	Date:	6125101
01311VOA.WH1 - Sample (5)				Page No.:

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270



PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-1

PAI Sample ID : P2101311-005

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed:

6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.050 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COIVII OUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	1,500	20	270	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	320	20	85	5.3
591-78-6	2-Hexanone	ND	20	ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	200	20	29	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	110	20	26	4.6
136777-61-2	m,p-Xylenes	530	20	120	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	220	20	50	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	Ke	Date:_	6/25/01
-			Page No.:

01311VOA.WH1 - Sample (5)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-1

PAI Sample ID: P2101311-005DUP

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

6/14/01

Analyst: Wade Henton

Date Analyzed:

6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.050 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	52	20	22	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	33	20	8.4	5.0
75-09-2	Methylene chloride	ND	20	ND	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone	56	20	19	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	27	20	4.9	3.7
71-43-2	Benzene	33	20	10	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/25/01
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01311VOA.WH1 - DUP



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-1

PAI Sample ID: P2101311-005DUP

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton Matrix: Tedlar Bag Date Analyzed: 6/15/01

Volume(s) Analyzed:

0.050 Liter(s)

D.F. = 1.00

	GOV WOLLD ID	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIIVII I μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	1,400	20	270	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	330	20	88	5.3
591-78-6	2-Hexanone	ND	20	ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	200	20	29	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	110	20	26	4.6
136777-61-2	m,p-Xylenes	540	20	120	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	220	20	51	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date: 6 35 01
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01311VOA.WH1 - DUP



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

Client

PAI Sample ID : P2101311-006

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.050 Liter(s)

D.F. = 1.00

a.a.,	. COL MOLINID	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMΠ1 μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	140	20	57	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	ND	20	ND	5.0
75-09-2	Methylene chloride	ND	20	ND	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone	54	20	18	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	23	20	4.3	3.7
71-43-2	Benzene	21	20	6.6	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6	125101
Verified By:	KR	Date:	6	125101

01311VOA.WHI - Sample (6)



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : VMP-2

PAI Sample ID : P2101311-006

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.050 Liter(s)

D.F. = 1.00

G. G. II	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	1,200	20	230	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	210	20	55	5.3
591-78-6	2-Hexanone	ND	20	ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	330	20	49	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	70	20	16	4.6
136777-61-2	m,p-Xylenes	330	20	76	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	140	20	31	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/25/01	
			Page 1	Νo

01311VOA.WH1 - Sample (6)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

VMP-D1

PAI Sample ID:

P2101311-007

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Analyst: Wade Henton

Volume(s) Analyzed:

0.0030 Liter(s)

D.F. = 1.00

GAG."	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	330	ND	160
75-01-4	Vinyl Chloride	ND	330	ND	130
74-83-9	Bromomethane	ND	330	ND	86
75-00-3	Chloroethane	ND	330	ND	130
67-64-1	Acetone	ND	330	ND	140
75-69-4	Trichlorofluoromethane	ND	330	ND	59
75-35-4	1,1-Dichloroethene	ND	330	ND	84
75-09-2	Methylene chloride	440	330	130	96
76-13-1	Trichlorotrifluoroethane	ND	330	ND	44
75-15-0	Carbon Disulfide	ND	330	ND	110
156-60-5	trans-1,2-Dichloroethene	ND	330	ND	84
75-34-3	1,1-Dichloroethane	ND	330	ND	82
1634-04-4	Methyl tert-Butyl Ether	ND	330	ND	92
108-05-4	Vinyl Acetate	ND	330	ND	95
78-93-3	2-Butanone	ND	330	ND	110
156-59-2	cis-1,2-Dichloroethene	ND	330	ND	84
67-66-3	Chloroform	ND	330	ND	68
107-06-2	1,2-Dichloroethane	ND	330	ND	82
71-55-6	1,1,1-Trichloroethane	ND	330	ND	61
71-43-2	Benzene	ND	330	ND	100
56-23-5	Carbon Tetrachloride	ND	330	ND	53
78-87-5	1,2-Dichloropropane	ND	330	ND	72

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/25/01

01311VOA.WH1 - Sample (7)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : VMP-D1
PAI Sample ID : P2101311-007

Test Code : Modified EPA TO-15

Instrument : HP5973/Tekmar AUTOCan Elite
Analyst : Wade Henton

Date Sampled : 6/14/01

Date Received : 6/14/01

Date Analyzed : 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.0030 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	330	ND	50
79-01-6	Trichloroethene	31,000	330	5,700	62
10061-01-5	cis-1,3-Dichloropropene	ND	330	ND	73
108-10-1	4-Methyl-2-pentanone	ND	330	ND	81
10061-02-6	trans-1,3-Dichloropropene	ND	330	ND	73
79-00-5	1,1,2-Trichloroethane	ND	330	ND	61
108-88-3	Toluene	ND	330	ND_	88
591-78-6	2-Hexanone	ND	330	ND	81
124-48-1	Dibromochloromethane	ND	330	ND	39
106-93-4	1,2-Dibromoethane	ND	330	ND	43
127-18-4	Tetrachloroethene	760	330	110	49
108-90-7	Chlorobenzene	ND	330	ND	72
100-41-4	Ethylbenzene	ND	330	ND	77
136777-61-2	m,p-Xylenes	650	330	150	77
75-25-2	Bromoform	ND	330	ND	32
100-42-5	Styrene	ND	330	ND	78
95-47-6	o-Xylene	ND	330	ND	77
79-34-5	1,1,2,2-Tetrachloroethane	ND	330	ND	49
541-73-1	1,3-Dichlorobenzene	ND	330	ND	55
106-46-7	1,4-Dichlorobenzene	ND	330	ND	55
95-50-1	1,2-Dichlorobenzene	ND	330	ND	55

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/25/01
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01311VOA.WH1 - Sample (7)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2
PAI Sample ID : P2101311-008

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton Matrix: Tedlar Bag Date Analyzed: 6/15/01

Volume(s) Analyzed:

0.0020 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
0110 "	COM COM	μg/m³	μg/m³	ppb∨	ppbV
74-87-3	Chloromethane	ND	500	ND	240
75-01-4	Vinyl Chloride	ND	500	ND	200
74-83-9	Bromomethane	ND	500	ND	130
75-00-3	Chloroethane	ND	500	ND	190
67-64-1	Acetone	ND	500	ND	210
75-69-4	Trichlorofluoromethane	ND	500	ND	89
75-35-4	1,1-Dichloroethene	640	500	160	130
75-09-2	Methylene chloride	920	500	260	140
76-13-1	Trichlorotrifluoroethane	ND	500	ND	65
75-15-0	Carbon Disulfide	ND	500	ND	160
156-60-5	trans-1,2-Dichloroethene	ND	500	ND	130
75-34-3	1,1-Dichloroethane	ND	500	ND	120
1634-04-4	Methyl tert-Butyl Ether	ND	500	ND	140
108-05-4	Vinyl Acetate	ND	500	ND	140
78-93-3	2-Butanone	ND	500	ND	170
156-59-2	cis-1,2-Dichloroethene	ND	500	ND	130
67-66-3	Chloroform	ND	500	ND	100
107-06-2	1,2-Dichloroethane	ND	500	ND	120
71-55-6	1,1,1-Trichloroethane	ND	500	ND	92
71-43-2	Benzene	2,100	500	660	160
56-23-5	Carbon Tetrachloride	ND	500	ND	80
78-87-5	1,2-Dichloropropane	ND	500	ND	110

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date: 6/25/01
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01311VOA.WH1 - Sample (8)

Page No.:



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2
PAI Sample ID : P2101311-008

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton Matrix: Tedlar Bag Date Analyzed: 6/15/01

Volume(s) Analyzed:

0.0020 Liter(s)

D.F. = 1.00

CAC#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	LIMI I μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	500	ND	75
 	······································		<u> </u>	5,400	93
79-01-6	Trichloroethene	29,000	500	ļ	
10061-01-5	cis-1,3-Dichloropropene	ND	500	ND	110
108-10-1	4-Methyl-2-pentanone	ND	500	ND	120
10061-02-6	trans-1,3-Dichloropropene	ND	500	ND	110
79-00-5	1,1,2-Trichloroethane	ND	500	ND	92
108-88-3	Toluene	ND	500	ND	130
591-78-6	2-Hexanone	ND	500	ND	120
124-48-1	Dibromochloromethane	ND	500	ND	59
106-93-4	1,2-Dibromoethane	ND	500	ND	65
127-18-4	Tetrachloroethene	4,000	500	590	74
108-90-7	Chlorobenzene	ND	500	ND	110
100-41-4	Ethylbenzene	ND	500	ND	120
136777-61-2	m,p-Xylenes	880	500	200	120
75-25-2	Bromoform	ND	500	ND	48
100-42-5	Styrene	ND	500	ND	120
95-47-6	o-Xylene	ND	500	ND	120
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	ND	73
541-73-1	1,3-Dichlorobenzene	ND	500	ND	83
106-46-7	1,4-Dichlorobenzene	ND	500	ND	83
95-50-1	1,2-Dichlorobenzene	ND	500	ND	83

Verified By:	KR	Date:	6/25/01
			Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : Blower Influent PAI Sample ID : P2101311-009

Test Code : Modified EPA TO-15

Instrument : HP5973/Tekmar AUTOCan Elite

Date Sampled : 6/14/01

Date Received : 6/14/01

Analyst: Wade Henton Date Analyzed: 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.00040 Liter(s)

D.F. = 1.00

C10#	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	μg/m³	LIMIT μg/m³	ppbV	LIMIT ppbV
74-87-3	Chloromethane	ND	2,500	ND	1,200
75-01-4	Vinyl Chloride	ND	2,500	ND	980
74-83-9	Bromomethane	ND	2,500	ND	640
75-00-3	Chloroethane	ND	2,500	ND	950
67-64-1	Acetone	ND	2,500	ND	1,100
75-69-4	Trichlorofluoromethane	ND	2,500	ND	450
75-35-4	1,1-Dichloroethene	ND	2,500	ND	630
75-09-2	Methylene chloride	3,100	2,500	900	720
76-13-1	Trichlorotrifluoroethane	ND	2,500	ND	330
75-15-0	Carbon Disulfide	ND	2,500	ND	800
156-60-5	trans-1,2-Dichloroethene	ND	2,500	ND	630
75-34-3	1,1-Dichloroethane	ND	2,500	ND	620
1634-04-4	Methyl tert-Butyl Ether	ND	2,500	ND	690
108-05-4	Vinyl Acetate	ND	2,500	ND	710
78-93-3	2-Butanone	ND	2,500	ND	850
156-59-2	cis-1,2-Dichloroethene	ND	2,500	ND	630
67-66-3	Chloroform	ND	2,500	ND	510
107-06-2	1,2-Dichloroethane	ND	2,500	ND	620
71-55-6	1,1,1-Trichloroethane	ND	2,500	ND	460
71-43-2	Benzene	ND	2,500	ND	780
56-23-5	Carbon Tetrachloride	ND	2,500	ND	400
78-87-5	1,2-Dichloropropane	ND	2,500	ND	540

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:	6/25/01	
			Page	No.:

01311VOA.WH1 - Sample (9)



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : Blower Influent PAI Sample ID : P2101311-009

Test Code : Modified EPA TO-15

Instrument : HP5973/Tekmar AUTOCan Elite
Analyst : Wade Henton

Date Sampled : 6/14/01

Date Received : 6/15/01

Matrix: Tedlar Bag Volume(s) Analyzed: 0.00040 Liter(s)

D.F. = 1.00

CAC#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	2,500	ND	370
79-01-6	Trichloroethene	250,000	2,500	46,000	470
10061-01-5	cis-1,3-Dichloropropene	ND	2,500	ND	550
108-10-1	4-Methyl-2-pentanone	ND	2,500	ND	610
10061-02-6	trans-1,3-Dichloropropene	ND	2,500	ND	550
79-00-5	1,1,2-Trichloroethane	ND	2,500	ND	460
108-88-3	Toluene	ND	2,500	ND	660
591-78-6	2-Hexanone	ND	2,500	ND	610
124-48-1	Dibromochloromethane	ND	2,500	ND	290
106-93-4	1,2-Dibromoethane	ND	2,500	ND	330
127-18-4	Tetrachloroethene	5,100	2,500	750	370
108-90-7	Chlorobenzene	ND	2,500	ND	540
100-41-4	Ethylbenzene	ND	2,500	ND	580
136777-61-2	<i>m,p</i> -Xylenes	ND	2,500	ND	580
75-25-2	Bromoform	ND	2,500	ND	240
100-42-5	Styrene	ND	2,500	ND	590
95-47-6	o-Xylene	ND	2,500	ND	580
79-34-5	1,1,2,2-Tetrachloroethane	ND	2,500	ND	360
541-73-1	1,3-Dichlorobenzene	ND	2,500	ND	420
106-46-7	1,4-Dichlorobenzene	ND	2,500	ND	420
95-50-1	1,2-Dichlorobenzene	ND	2,500	ND	420

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:	KR	Date:_	6/25/01
	•		Page No

01311VOA.WH1 - Sample (9)



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Blower Inf Dup.

PAI Sample ID : P2101311-010

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed: 0.00040 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	2,500	ND	1,200
75-01-4	Vinyl Chloride	ND	2,500	ND	980
74-83-9	Bromomethane	ND	2,500	ND	640
75-00-3	Chloroethane	ND	2,500	ND	950
67-64-1	Acetone	ND	2,500	ND	1,100
75-69-4	Trichlorofluoromethane	ND	2,500	ND	450
75-35-4	1,1-Dichloroethene	ND	2,500	ND	630
75-09-2	Methylene chloride	2,600	2,500	730	720
76-13-1	Trichlorotrifluoroethane	ND	2,500	ND	330
75-15-0	Carbon Disulfide	ND	2,500	ND	800
156-60-5	trans-1,2-Dichloroethene	ND	2,500	ND	630
75-34-3	1,1-Dichloroethane	ND	2,500	ND	620
1634-04-4	Methyl tert-Butyl Ether	ND	2,500	ND	690
108-05-4	Vinyl Acetate	ND	2,500	ND	710
78-93-3	2-Butanone	ND	2,500	ND	850
156-59-2	cis-1,2-Dichloroethene	ND	2,500	ND	630
67-66-3	Chloroform	ND	2,500	ND	510
107-06-2	1,2-Dichloroethane	ND	2,500	ND	620
71-55-6	1,1,1-Trichloroethane	ND	2,500	ND	460
71-43-2	Benzene	ND	2,500	ND	780
56-23-5	Carbon Tetrachloride	ND	2,500	ND	400
78-87-5	1,2-Dichloropropane	ND	2,500	ND	540

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

____Date: 6 25 01 Verified By:___ Page No.:

01311VOA.WHI - Sample (10)



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Blower Inf Dup. PAI Sample ID : P2101311-010

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

6/14/01

Analyst: Wade Henton

Date Received: Date Analyzed: 6/15/01

Matrix: Tedlar Bag

01311VOA.WH1 - Sample (10)

Volume(s) Analyzed: 0.00040 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	2,500	ND	370
79-01-6	Trichloroethene	230,000	2,500	44,000	470
10061-01-5	cis-1,3-Dichloropropene	ND	2,500	ND	550
108-10-1	4-Methyl-2-pentanone	ND	2,500	ND	610
10061-02-6	trans-1,3-Dichloropropene	ND	2,500	ND	550
79-00-5	1,1,2-Trichloroethane	ND	2,500	ND	460
108-88-3	Toluene	ND	2,500	ND	660
591-78-6	2-Hexanone	ND	2,500	ND	610
124-48-1	Dibromochloromethane	ND	2,500	ND	290
106-93-4	1,2-Dibromoethane	ND	2,500	ND	330
127-18-4	Tetrachloroethene	5,100	2,500	740	370
108-90-7	Chlorobenzene	ND	2,500	ND	540
100-41-4	Ethylbenzene	ND	2,500	ND	580
136777-61-2	m,p-Xylenes	ND	2,500	ND	580
75-25-2	Bromoform	ND	2,500	ND	240
100-42-5	Styrene	ND	2,500	ND	590
95-47-6	o-Xylene	ND	2,500	ND	580
79-34-5	1,1,2,2-Tetrachloroethane	ND	2,500	ND	360
541-73-1	1,3-Dichlorobenzene	ND	2,500	ND	420
106-46-7	1,4-Dichlorobenzene	ND	2,500	ND	420
95-50-1	1,2-Dichlorobenzene	ND	2,500	ND	420

Verified By	:KR	Date: 6/25/01
		* 37



Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : Equip. Blank PAI Sample ID : P2101311-011

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/14/01

Analyst: Wade Henton

Date Analyzed: 6/15/01

Matrix : Tedlar Bag Volume(s) Analyzed :

nalyzed: 0.100 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CIRS "	337.2	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	10	ND	4.8
75-01-4	Vinyl Chloride	ND	10	ND	3.9
74-83-9	Bromomethane	ND	10	ND	2.6
75-00-3	Chloroethane	ND	10	ND	3.8
67-64-1	Acetone	59	10	25	4.2
75-69-4	Trichlorofluoromethane	ND	10	ND	1.8
75-35-4	1,1-Dichloroethene	ND	10	ND	2.5
75-09-2	Methylene chloride	18	10	5.2	2.9
76-13-1	Trichlorotrifluoroethane	ND	10	ND	1.3
75-15-0	Carbon Disulfide	ND	10	ND	3.2
156-60-5	trans-1,2-Dichloroethene	ND	10	ND	2.5
75-34-3	1,1-Dichloroethane	ND	10	ND	2.5
1634-04-4	Methyl tert-Butyl Ether	16	10	4.4	2.8
108-05-4	Vinyl Acetate	ND	10	ND	2.8
78-93-3	2-Butanone	ND	10	ND	3.4
156-59-2	cis-1,2-Dichloroethene	ND	10	ND	2.5
67-66-3	Chloroform	ND	10	ND	2.0
107-06-2	1,2-Dichloroethane	ND	10	ND	2.5
71-55-6	1,1,1-Trichloroethane	ND	10	ND	1.8
71-43-2	Benzene	13	10	4.1	3.1
56-23-5	Carbon Tetrachloride	ND	10	ND	1.6
78-87-5	1,2-Dichloropropane	ND	10	ND	2.2

		Verified By:	KE	_Date:_	6/25/01
O 4 11/111	Semple (11)				Page No :



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Equip. Blank PAI Sample ID : P2101311-011

Test Code: Modified EPA TO-15

Date Sampled: 6/14/01

Instrument: HP5973/Tekmar AUTOCan Elite

6/14/01

Analyst: Wade Henton

Date Received: Date Analyzed: 6/15/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.100 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
0.10		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	10	ND	1.5
79-01-6	Trichloroethene	400	10	75	1.9
10061-01-5	cis-1,3-Dichloropropene	ND	10	ND	2.2
108-10-1	4-Methyl-2-pentanone	ND	10	ND	2.4
10061-02-6	trans-1,3-Dichloropropene	ND	10	ND	2.2
79-00-5	1,1,2-Trichloroethane	ND	10	ND	1.8
108-88-3	Toluene	130	10	34	2.7
591-78-6	2-Hexanone	ND	10	ND	2.4
124-48-1	Dibromochloromethane	ND	10	ND	1.2
106-93-4	1,2-Dibromoethane	ND	10	ND	1.3
127-18-4	Tetrachloroethene	13	10	1.9	1.5
108-90-7	Chlorobenzene	ND	10	ND	2.2
100-41-4	Ethylbenzene	41	10	9.3	2.3
136777-61-2	m,p-Xylenes	190	10	44	2.3
75-25-2	Bromoform	ND	10	ND	0.97
100-42-5	Styrene	ND	10	ND	2.3
95-47-6	o-Xylene	81	10	19	2.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	10	ND	1.7
106-46-7	1,4-Dichlorobenzene	ND	10	ND	1.7
95-50-1	1,2-Dichlorobenzene	ND	10	ND	1.7

Verified By:_	KR	Date:	6/25/01
		-	Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P010615-MB

Test Code: Modified EPA TO-15

Date Sampled:

NA

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 6/15/01

NA

Analyst: Wade Henton Matrix: Tedlar Bag

Date Analyzed: Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS "	COM COM	μg/m³	μg/m³	ppbV	ppbV
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78- 93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

	Verified By:	KR	Date:	6/25/01
01311VOA.WH1 - MBlank				Page No.:



A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: **Method Blank** PAI Sample ID: P010615-MB

Test Code: Modified EPA TO-15

Date Sampled:

NA

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

NA

Analyst: Wade Henton

Date Analyzed:

6/15/01

Matrix: Tedlar Bag

01311VOA.WH1 - MBlank

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

0.40.4	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	a/m3		nmh\.	
		μg/m³	μg/m³	ppbV	ppbV
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	95-50-1 1,2-Dichlorobenzene		1.0	ND	0.17

Verified By:	KR	Date: 6/25/01
· -		Dogo Mo :

Performance Analytical Inc. Sample Acceptance Check Form

Client:	Erler & Kalinowski		mpie Acceptance C	Work order:	P210131	1		
Project:	Webb / 961025.03							
Cooler/S	Samples received on:	6/14/01	Date opened:	6/14/01	b	y RD		
						Yes	No	N/A
1	Were custody seals on	outside of cooler/E	Box?				X	
	Location of seal(s)?			Sealing Lid?				\boxtimes
	Were signature and da	ate correct?	·	•				X
	Were seals intact?							\boxtimes
	Were custody seals on	outside of sample	container?				X	
	Location of seal(s)?			Sealing Lid?				\boxtimes
	Were signature and da	ate correct?		•				X
	Were seals intact?							X
2	Were sample container	rs clearly marked y	with client sample ID a	and date of collection	nn?	_ X		
3	Were sample container					×		
4	Were correct sample co			o in good condido		X		
5	Were chain-of-custody					X		
6	Did sample container l			uerc?		X		
. 7	Was adequate sample v	=		ocis:		· 🗵		
8	Are samples within spec					X		
9	•							×
9	Was proper temperatur			°C		ы	ч	ign.
		Cooler Temperate		°C				
10	T	Blank Temperatur		•	0	[(C)	
10	Is preservation necessar	_	ample type and Chent	specific information	n?		X	
	Were samples submitt	-					X	
	Did analyst preserve t	_						X
		-	absence of air bubbles	7				X
·	pH of samples checke	d by analyst?						<u> </u>
	Lab Sample ID	Required p	H Comply	Headspace	Comply	Reagent	Added	Volume
	•	Hq	(VA)	(France/Abours)	(920)	(Easte		Added
		•						
P2101311- P2101311-		<u> </u>		NA NA				
P2101311-				NA NA				
P2101311-				NA				
P2101311-				NA				
P2101311- P2101311-				NA NA		1		
P2101311-		-		NA	<u> </u>	 		
P2101311-				NA				
P2101311- P2101311-		<u> </u>		NA NA		<u> </u>		. <u> </u>
1 2101311-	Uli			INA		1		
Explain	any discrepancies: (in	clude lab sampl	e ID numbers):			<u> </u>		
T	J	· ·	-/		 			

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

٠ ١	1		CHILLIN OF GOODS ,		•	
Erler & Kal	lníowski, inc.				Analytical Laboratory: PERFORMANO	£
Project Nu	mber: 961025.C	2 3			Date Sampled: 6-14-01	
	me: <i>INEbb</i>			_	Sampled By: B. LIGGEH	
	Samples: SVE SA	9 MPLING			Report Results To: BRIAN Auchar!	<u> </u>
		,	SOUTHGATE, CA.	<u> </u>	Phone Number: (310) 314-8855	
Lab Sample 1 D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Hethod Number)	Results Required By (Date/Time)
//	EQID. BLANK	VAPOR	5 L TEDLAR.	10:47	TO-14	Z WEEKS -C
		ε,				
					,	
						
	habruat longs		1:		1	

Relinquished By:	Received By:				
Name / Signature / Affiliation	Date	Time	Name / Signature / A	ffillation	
BROUGGEH / BROCKED	/EKI 6-140/	2:000	D Ball	COAST CO	URIFO
138001971			V. Coariguen	##DVR 6/14/01.	4:16 m
				7	7